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SITE INFORMATION

LOCATION: 3803 OLEANDER DRIVE
WILMINGTON, NC

COUNTY: NEW HANOVER COUNTY

TOWNSHIP: WILMINGTON

TOTAL EXIST. ACREAGE: 0.71 AC

TOTAL PROP. ACREAGE: 0.71 AC (30,800 SF)

PARCEL ID: 313717.21.3085.000

DEED BOOK/PAGE: 5649/0642

ZONING: RB

LAND CLASS: CURRENT = COM

LANDUSE CODE: 584 - EATING PLACE W/ALCOHOL

WATERSHED: BURNT HILL CREEK

CAMA CLASSIFICATION: URBAN

MUNICIPALITY: CITY OF WILMINGTON

AREA DISTURBED: 0.71 AC

SEASONAL HIGH WATER TABLE: APPROX. 40' AMSL

MINIMUM BUILDING SETBACKS:

FRONT: 25'

REAR: 25'

SIDE: 0'

MAX. BLDG. HT: 35'

MAX. LOT COVERAGE: 40%

PROPOSED BUILDING SETBACKS:

FRONT: 26'

REAR: 117'

SIDE: 11', 68'

BLDG. HT: 21'4"

LOT COVERAGE: 14.6%

BUILDING DATA:

PROPOSED USE: RETAIL MERCANTILE

TOTAL BUILDING SIZE: 4,500± SF

CONSTRUCTION TYPE: IIB

PARKING:

TOTAL REQUIRED PARKING: 1 SPACES/400SF RETAIL MIN
=> 12 SPACES REQ'D MIN
1 SPACE/200SF RETAIL MAX
=> 23 SPACES MAX

LOADING SPACES REQUIRED: 0

HANDICAP SPACES REQUIRED: 2

BICYCLE PARKING REQUIRED: 0

PARKING PROVIDED:

REGULAR 9x19': 20

H.C. (REGULAR): 0

H.C. (VAN ACCESSIBLE): 2

LOADING AREA: 0

TOTAL: 22

BICYCLE PARKING PROVIDED: 0

UTILITY AGENCIES:

WATER & SEWER
CAPE FEAR VALLEY
PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DR.
WILMINGTON, NC 28403
910-332-6550

NATURAL GAS
PIEDMONT NATURAL GAS
4720 PIEDMONT ROW DR.
CHARLOTTE, NC 28210
1-800-752-7304

ELECTRIC
PROGRESS ENERGY BUSINESS
SERVICES
PO BOX 1551
RALEIGH, NC 27602
866-582-6345

TELEPHONE
BELL SOUTH
WILMINGTON, NC
910-392-8712
CONTACT: MR. STEVE DAYVAULT

TELEVISION
TIME WARNER CABLE
910-763-4638

GOVERNING AGENCIES:

PLANNING
CITY OF WILMINGTON
305 CHESTNUT STREET
WILMINGTON, NC 28402
910-341-5815
CONTACT: DAWN SNOTHERLY

ENGINEERING
CITY OF WILMINGTON
PUBLIC SERVICES
414 CHESTNUT STREET
WILMINGTON, NC 28402
910-341-5856
CONTACT: ROB GORDON

NCDOT-DIV. 3, DIST. 3
NCDOT-DIV. 3, DIST. 3 OFFICE
700 DIVISION DR.
WILMINGTON, NC 28401
910-251-2655
CONTACT: MR. ANTHONY LAW, PE
alaw@ncdot.gov

General Notes:

- Topographical data performed by Michael Underwood & Associates, PA.. Contours and boundry information shown herein are from an actual field survey.
- The Contractor shall notify and cooperate with all utility companies of firms having facilities on or adjacent to the site before disturbing, altering, removing, relocating, adjusting or connecting to said facilities. The Owner shall pay all costs in connection with alteration of or relocation of any existing facilities.
- All excavation is unclassified and shall include all materials encountered.
- All structural fill material shall be free of all sticks, rocks, and clumps of mud.
- Unusable excavated materials and all waste resulting from clearing and grubbing shall be disposed of off-site by the Contractor in an approved solid waste landfill.
- The proposed building will not be sprinkled.
- There is existing underground water, sewer, electrical, natural gas and FIBER OPTIC on-site or within close proximity. Contractors shall dig with extreme caution.
- Concrete Sub shall be responsible for all score joints and expansion joints. Should a question arise about the proposed pattern consult with the Engineer prior to pouring.
- Contractor to furnish all pavement markings as shown.
- Location of underground utilities are approximate and must be field verified. Contact the NC One Call Center at least 48 hours prior to digging @ 1.800.632.4949. Michael Underwood & Associates, PA. has only located the utilities that are above ground at the time of field survey. Underground lines shown herein are approximate or as reported by various responsible parties. The surveyor does not guarantee that any underground structures such as utilities, tanks and pipes are located herein.
- All pipe lengths are horizontal distances and are approximate.
- All work shall comply with all applicable codes, regulations, and/or local standards imposed by City of Wilmington.
- All construction and materials shall meet City of Wilmington Utility Specifications and Standards, latest edition. All work within NCDOT right-of-way shall meet the specifications and standards of NCDOT.
- All concrete pipe is to be ASTM C-76, Class III with ram-nek.
- This property is located in zone "X" per FEMA Community Map #: 37200313700, Dated April 3, 2006
- All lot dimensions shown are approximate. Consult the boundary survey of actual site boundary information.
- Wetlands and ponds are not present on site.
- The Contractor shall be responsible for all work zone traffic control in or adjacent to NCDOT right-of-way. All signs, pavement markings and other traffic control devices shall conform to the Manual on Uniform Traffic Control Devices (MUTCD), latest edition.
- Prior to placing C&G stone base, the Contractor should notify the Project Engineer to inspect and proof roll the subgrade. Any stone placed without prior approval will be the sole responsibility of the Contractor.
- DESIGN/FIELD CONDITIONS quite easily may vary from that represented in the initial soils report and/or topographical report. Isolated areas may show up weak and adverse soils or groundwater conditions may be discovered that were not revealed during the initial soils investigation. Therefore, the Owner/Client is to be aware that Curry Engineering Group, PLLC will not and cannot be held responsible for any failures to either a street or parking lot pavement design unless we can be fully and totally involved in the construction process which may include, but may not necessarily be limited to, testing subgrade and base density, engaging the Design Engineer for the evaluation of the subgrade and for the observation of proof rolling subgrade and base at various steps of construction, opportunity for the Design Engineer to call in a soils Engineer for consultation and advice, etc. - steps which taken altogether with the initial design shown on the plans, constitute the complete design of the road, street of parking area (private or public). The Design Engineer must be given the full latitude and opportunity to complete the design by fully participating in the construction process. Plan design is a small portion of the design and cannot be separated from the construction process if the Owner's/Client's desire is to have the Design Engineer stand behind the completed designed Project.
- All utility services, (power, telephone, cable, etc.) are proposed to be underground. Do not seed or mulch disturbed areas until all underground utilities have been installed.
- Property is to be served by Cape Fear Public Utility Authority (Typ. 45, 47, 69, 70, 71, 72).
- The building setback lines shown on this plot are for the Engineer's use in establishing minimum lot frontages at the setback line and for reserving sufficient building area. Building Contractors are to verify lot line setbacks before setting forms or digging footings.
- Regulatory signs, stop signs and street name signs shall be manufactured from high intensity reflective materials.
- All excess topsoil and unclassified excavation is to be hauled off-site, unless otherwise directed by the Owner.
- All site construction must be inspected by The Project Engineer at the following stages:
 - Completion of grading subgrade prior to placing Stone Base.
 - Completion of Stone placement prior to paving.
 - Final inspection when all work is complete.
- The surveyor did not visibly see any cemeteries in any open areas unless otherwise noted.
- This property does not depict encumbrances that are found during a thorough title search.
- All HVAC units for the proposed building will be screened from public right of way.
- All curb and gutter to be 24" standard curb and gutter. All curb and Gutter within NCDOT or R/W shall be 30" standard.
- All curb and gutter and sidewalk concrete is to be minimum 3,000 psi at 28 days, air entrained.
- All dimensions are to face of curb unless indicated otherwise.
- Provide handicap signs, marking and ramps as shown.
- Handicap ramps are to meet "ADA Accessibility Guidelines for Buildings and Facilities" as detailed in the Federal Register, Volume 56, Number 144 dated July 26, 1991, rules and regulations activated January 26, 1992. For additional information, refer to the NC State Building Code Volume 1-C, "Making Buildings and Facilities Accessible to the Useable by the Physically Handicapped", 1991 edition. All street returns to have H.C. Ramps.
- Contractor SHALL NOT POUR any concrete before forms are inspected by the Project Engineer and/or Owner. Any concrete that has not been approved by the Engineer and/or Owner will be the responsibility of the Contractor.
- All areas not covered by building or parking shall be covered with 4" minimum of topsoil, free of root matter and rocks and grassed.
- Contractor shall saw-cut to provide smooth transitions where existing asphalt and/or curb and gutter is to be removed.
- The Contractor shall provide all the material and appurtenances necessary for the complete installation of the utilities. All pipe and fittings shall be inspected prior to being covered.
- All handicap spaces are to receive a handicap sign and handicap symbol painted on the asphalt. Note stalls to receive 'van accessible' signage.
- The Contractor shall refer to the architectural plans for exact locations and dimensions of precise building dimensions and exact utility entrance points.
- Information concerning underground utilities was obtained from available records and field conditions when possible, but the Contractor must determine the exact location and elevation of all existing utilities by digging test pits by hand at all utility crossings well in advance of trenching. If the clearances are less than specified on the plans or 12 inches, which ever is less, contact the Project Engineer prior to proceeding with construction.
- The Contractor shall include in his contract price the removal and disposal of any excess topsoil he determines is not required to perform the final grading and landscaping operation.

IMPERVIOUS AREA CALCULATIONS

PROPOSED IMPERVIOUS AREAS:	
BUILDING	4500 SF
TOTAL SITE ACREAGE	30,800 SF (0.71 AC)
EXISTING IMPERVIOUS	28,974 SF
NEWLY CONSTRUCTED IMPERVIOUS AREA	9,507 SF
PERVIOUS CONCRETE PAVEMENT AREA	1,973 SF
PERCENTAGE OF PERVIOUS CONCRETE THAT IS CONSIDERED IMPERVIOUS	25%
ADJUSTED TOTAL OF NEWLY CONSTRUCTED IMPERVIOUS	=9,502SF + 0.25X1,973 =9,995SF*
ALLOWABLE NEWLY CONSTRUCTED IMPERVIOUS	=10,000 SF

*BASED ON THE EXISTING ASPHALT THAT WILL BE OVERLAYED (6,305SF) AND THE USE OF PERVIOUS CONCRETE (1,973SF) THE NEWLY CONSTRUCTED IMPERVIOUS FOR THIS PROJECT IS REDUCED FROM 17,780SF TO 9,995SF, WHICH PUTS THIS PROJECT BELOW THE 10,000SF THRESHOLD FOR STORMWATER MANAGEMENT. REFER TO CALCULATIONS FOR ADDITIONAL INFORMATION.

Owner:

PHD @ Wilmington, LLC
3930 Max Pl.
Boynton Beach, FL 33436

919.610.0556 (v)
email: rhicks7@mac.com
Contact: Rob Hicks

Civil Engineering:

The Curry Engineering Group, PLLC
205 S. Fuquay Ave
Fuquay-Varina, NC 27526

919.552.0849 (v)
919.552.2043 (f)
email: doncurry@curryengineeringgroup.com
Contact: Don Curry, PE

Architect:

Finley Design, PA
1415 W NC Hwy 54, Suite 206
Durham, NC 27707

919.493.8200 (v)
email: kerry@finleydesignarch.com
Contact: Kerry Gray Finley, AIA

Surveyor:

Michael Underwood and Associates, PA
102 Cinema Drive, Suite A
Wilmington, NC 28403

910.815.0650 (v)
e-mail: mua@bizec.rr.com
Contact: Michael Underwood, PLS

- The Contractor is responsible for the design and implementation of all required/necessary sheeting, shoring, and special excavation measures required on the Project to meet OSHA, Federal, State and Local regulations pursuant to the installation of the work indicated on the drawings. PHD@Wilmington, LLC, City of Wilmington & Curry Engineering Group accept no responsibility for the design to install said items. 44. The Contractor shall include in the contract price daily record keeping of the as-built condition of all of the underground utilities, construction stakeout associated with the Project.
- All water line and sewer line installation shall conform to the standards and details of the State of North Carolina Department of Health Construction Permit and Cape Fear Public Utility Authority.
- The Construction Improvement Permit must be kept on the work site and shown upon request.
- The Contractor shall include in the contract price all material and labor associated with the testing of the water and sewer lines required by the State of North Carolina Department of Health & Cape Fear Public Utility Authority.
- The Contractor shall include in the contract price any de-watering necessary to construct the Project as shown on the plans.
- Natural gas is available. See Piedmont Natural Gas contract on this sheet for additional information.
- TESTING BY Contractor: Contractor shall employ at his expense an outside independent Soil Testing Service (approved by the Architect) to perform soil testing and inspection service for quality control testing during earthwork operations. Copies of results of tests shall be submitted by the Testing Service directly to the Contractor, the Architect, and the Structural Engineer. --The Testing Service will classify proposed on-site and borrow soils to verify that soils comply with specified requirements and to perform required field and laboratory testing. (Minimum required soil bearing capacity is noted on the structural drawings). --In paved and building slab areas, the Testing Service shall make at least one field density test for each 2000 square feet of fill in each compacted fill layer. If a test should fail to meet required density, the Contractor shall re-compact that layer. The Soil Testing Service shall perform additional tests at the Contractor's expense to show that the failed layer has reached the required compaction. --In foundation wall areas, the Testing Service shall make at least one field density test for each 100 feet or less of wall length of fill in each compacted fill layer, with no less than two tests along a wall face. If a test should fail to meet required density, the Contractor shall re-compact that layer. The Soil Testing Service shall perform additional tests at the Contractor's expense to show that the failed layer has reached the required compaction.
- COMPACTION: Compact each layer of backfill and fill soil materials and the top 12" of subgrade in cut areas to 98% of maximum density as determined by ASTM D698 for structures, slabs, and pavements and 90% of maximum density for lawns or unpaved areas.
- The building Contractor and the site work Contractor are to coordinate the installation of drainage pipes around the building structure.
- Any relocation of existing utilities will be at the cost of the Developer/Owner. The City will not accept responsibility for damages to curb and gutter or street improvements installed prior to underground services, nor will the City absorb the cost for borings to install underground service, pavement patching or damage to landscaping. These will be the responsibility of the Developer/Owner.
- Fire department vehicular access to all structures under construction shall be provided at all times. In areas where ground surfaces are soft or likely to become soft, hard all weather surface roads shall be provided and maintained.
- Address Numbers: must be posted on the front of the structure nearest to the main entrance in a position to be plainly legible, visible, and unobstructed from the street or road fronting the property.
- Disturbed area is less than 1 acre. Based on conversations with Beth Wetherill at New Hanover County Engineering, a formal Sedimentation and Erosion Control Plan is not required. However, certain erosion control measures will still be implemented on this project. Refer to the Erosion Control Plan for additional information.
- All construction shall be in accordance with all City of Wilmington and NCDENR Standards and Specifications.
- Maintain minimum 3' cover for all water pipe.
- Contractor shall maintain an all weather access for emergency vehicles at times during construction.
- Contact traffic engineering (910-341-7888) 48 hours prior to any excavation.
- Prior to any clearing, grading or construction activity, tree protection fencing will be installed around protected trees or groves of trees and no construction workers, tools, materials, or vehicles are permitted within the tree protection fencing.
- All pavement markings in public rights-of-way and for driveways are to be thermoplastic and meet City and/or NCDOT standards.
- It shall be the responsibility of the subdivision to erect official street name signs at all intersections associated with the subdivision in accordance with the Technical Standards and Specifications Manual. The subdivder may acquire and erect official street name signs or may choose to contract with the city to install the street signs and the subdivder shall pay the cost of such installation. Contact Traffic Engineering at 910-341-7888 to discuss installation of traffic and street name signs. Proposed street names must be approved prior to installation of street name signs.
- Traffic control devices (including signs and pavement markings) in areas open to public traffic are to meet MUTCD (Manual on Uniform Traffic Control Devices) standards.
- Contact with Traffic Engineering at 910-341-7888 to ensure that all traffic signal facilities and equipment are shown on the plan. Add a note to call Traffic Engineering at 910-341-7888 forty-eight hours prior to any excavation in the right of way.
- Any broken or missing sidewalk panels will be replaced.
- Contact Karen Dixon at 910-341-7888 to discuss street lighting options.
- Project shall comply with Cape Fear Public Utility Authority Cross Connection Control requirements. Water meter(s) cannot be released until all requirements are met and the State has given their Final Approval. Call 910-343-3910 for information.
- If the contractor desires Cape Fear Public Utility Authority water for construction he shall apply in advance for this service and must provide a reduced pressure zone (RPZ) backflow prevention device on the developer's side of the water meter box.
- Any irrigation system supplied by Cape Fear Public Utility Authority water shall comply with the Cape Fear Public Utility Authority Cross Connection Control regulations. Call 910-343-3910 for information.
- Any backflow prevention devices required by the Cape Fear Public Utility Authority will need to be on the list of approved devices by USFCCOCHR or ASSE.

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____



Public Services • Engineering Division

APPROVED DRAINAGE PLAN

Date: _____ Permit # _____

Signed: _____



11/30/12

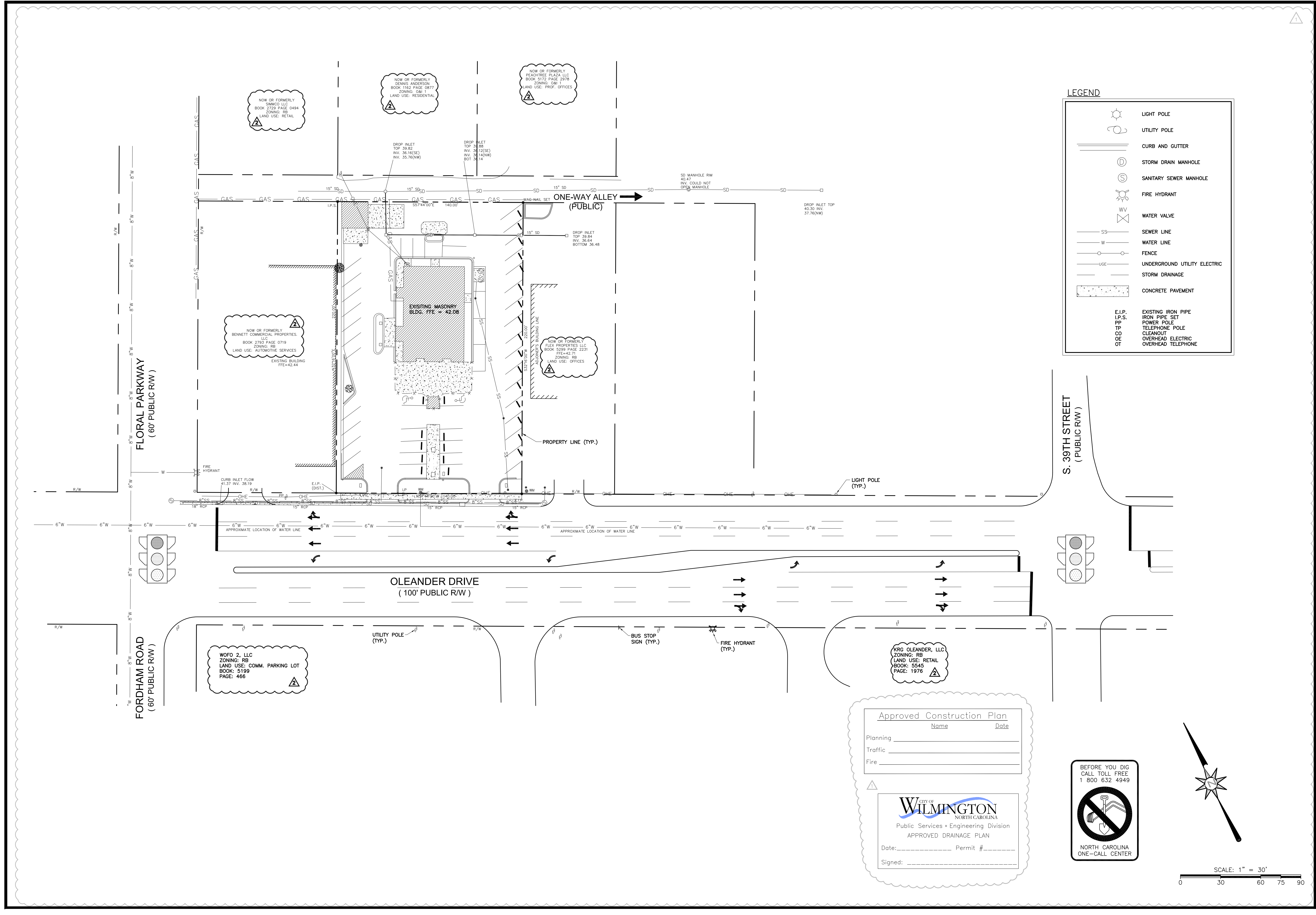
MATTRESS FIRM - WILMINGTON, NC

COVER SHEET

The Curry Engineering Group, PLLC

C-00

Z:\Projects Folder-Zeulien\2012\022 Mattress Firm-Wilmington\Plans\Plan Set\C-02-CBK.dwg, 12/3/2012 5:18:04 PM, ARCH D, 1:1



REVISIONS

1	10/18/12	COW/CFFA COMMENTS
2	11/20/12	COW 2ND REVIEW COMMENTS

DATE: SEPTEMBER, 2012

FILE NO: 2012-022

HORIZ. SCALE: 1" = 30'

VERT. SCALE: 24' x 36'

MATTRESS FIRM - WILMINGTON, NC

OVERALL EXISTING CONDITIONS

PO BOX 2018 • AVE. FLOUAT • WILMINGTON, NC 27230

PHONE: (919) 532-0849

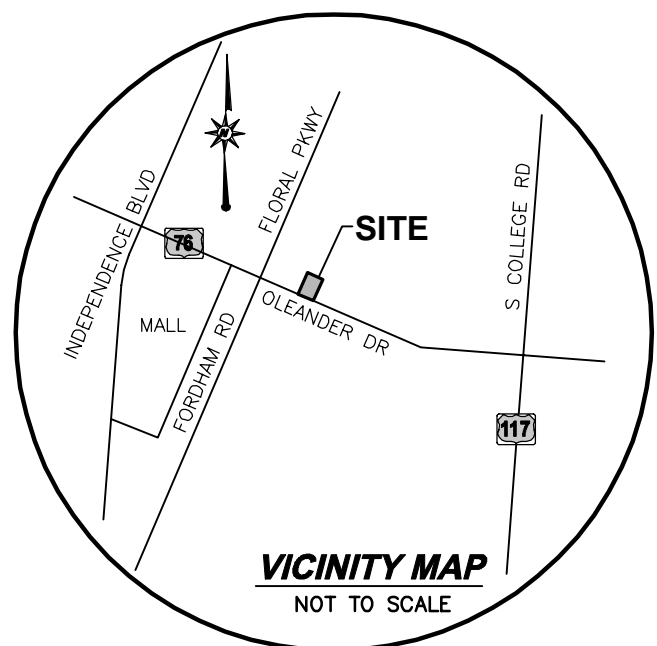
MOBILE: (919) 886-4857

NC LIC. NO. P-0799

The Curry Engineering Group, PLLC

www.curryengineeringgroup.com danecurry@curryengineeringgroup.com

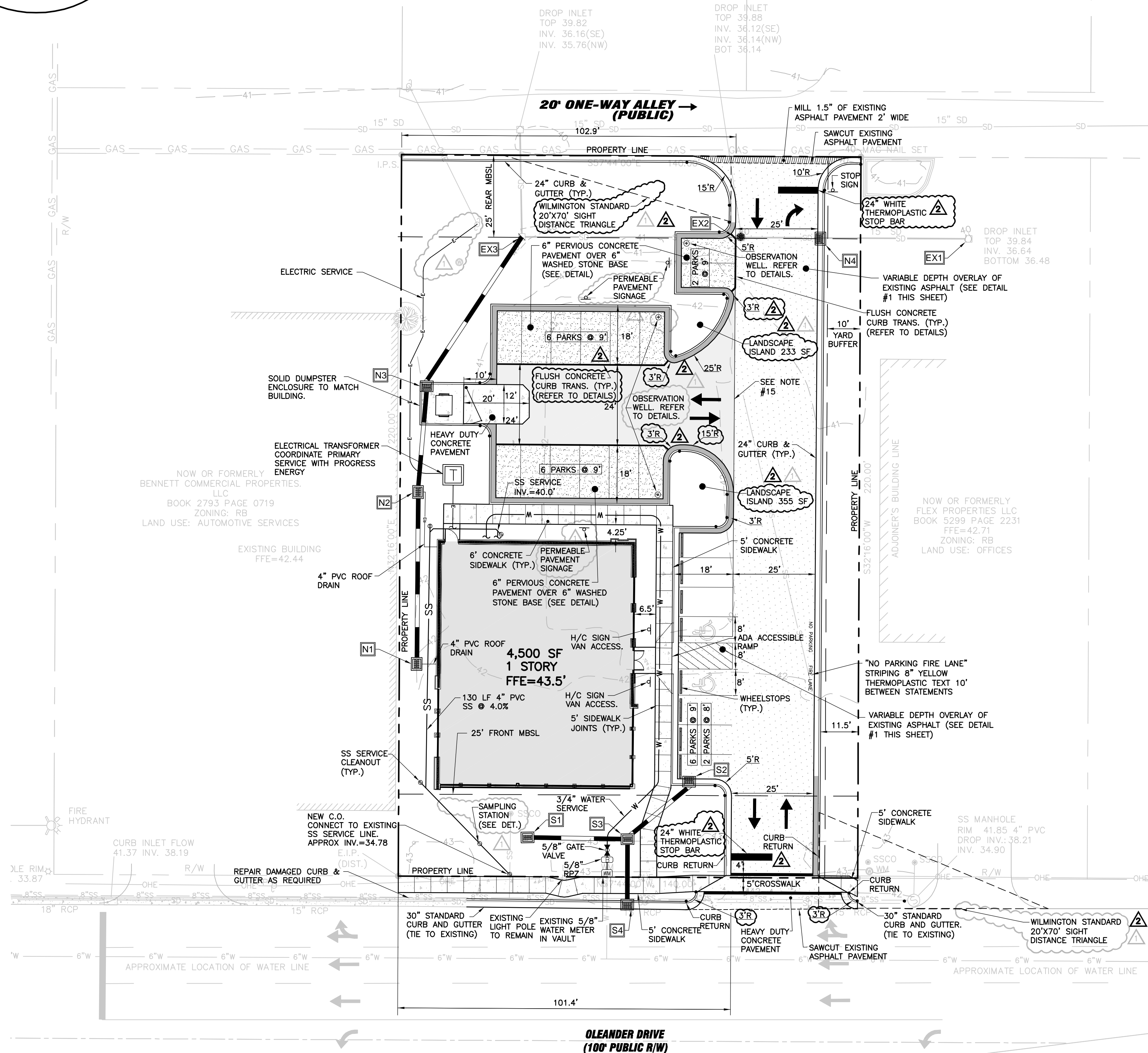
C-02



NOW OR FORMERLY
SIMCO LLC
BOOK 2729 PAGE 0494
ZONING: RB
LAND USE: RETAIL

NOW OR FORMERLY
DENNIS ANDERSON
BOOK 1162 PAGE 0877
ZONING: O&I
LAND USE: RESIDENTIAL

NOW OR FORMERLY
PEACHTREE PLAZA LLC
BOOK 5172 PAGE 2978
ZONING: O&I
LAND USE: PROF. OFFICES



SITE INFORMATION

LOCATION: 3803 OLEANDER DRIVE
WILMINGTON, NC

COUNTY: NEW HANOVER COUNTY

TOWNSHIP: WILMINGTON

TOTAL EXIST. ACREAGE: 0.71 AC

TOTAL PROP. ACREAGE: 0.71 AC (30,800 SF)

PARCEL ID: 313717.21.3085.000

DEED BOOK/PAGE: 5649/0642

ZONING: RB

LAND CLASS: CURRENT = COM

LANDUSE CODE: 584 - EATING PLACE W/ALCOHOL

WATERSHED: BURNT HILL CREEK

CAMA CLASSIFICATION: URBAN

MUNICIPALITY: CITY OF WILMINGTON

AREA DISTURBED: 0.71 AC

SEASONAL HIGH WATER TABLE: APPROX. 40' AMSL

MINIMUM BUILDING SETBACKS:

FRONT: 25'

REAR: 25'

SIDE: 0'

MAX. BLDG. HT: 35'

MAX. LOT COVERAGE: 40%

PROPOSED BUILDING SETBACKS:

FRONT: 26'

REAR: 117'

SIDE: 11', 68'

BLDG. HT: 21'4"

LOT COVERAGE: 14.6%

BUILDING DATA:

PROPOSED USE: RETAIL MERCANTILE

TOTAL BUILDING SIZE: 4,500± SF

CONSTRUCTION TYPE: MERCANTILE

PARKING:

TOTAL REQUIRED PARKING: 1 SPACES/400SF RETAIL MIN
≥ 12 SPACES REQ'D MIN
1 SPACE/200SF RETAIL MAX
= 23 SPACES MAX

LOADING SPACES REQUIRED: 0

HANDICAP SPACES REQUIRED: 2

BICYCLE PARKING REQUIRED: 0

PARKING PROVIDED:

REGULAR 9x19' 20

H.C. (REGULAR) 0

H.C. (VAN ACCESSIBLE) 2

LOADING AREA 0

TOTAL: 22

BICYCLE PARKING PROVIDED: 0

IMPERVIOUS AREA CALCULATIONS

PROPOSED IMPERVIOUS AREAS:

BUILDING 4500 SF

TOTAL SITE ACREAGE 30,800 SF (0.71 AC)

EXISTING IMPERVIOUS 28,974 SF

NEWLY CONSTRUCTED IMPERVIOUS AREA 9,507 SF

PERVIOUS CONCRETE PAVEMENT AREA 1,973 SF

PERCENTAGE OF PERVIOUS CONCRETE THAT IS CONSIDERED IMPERVIOUS 25%

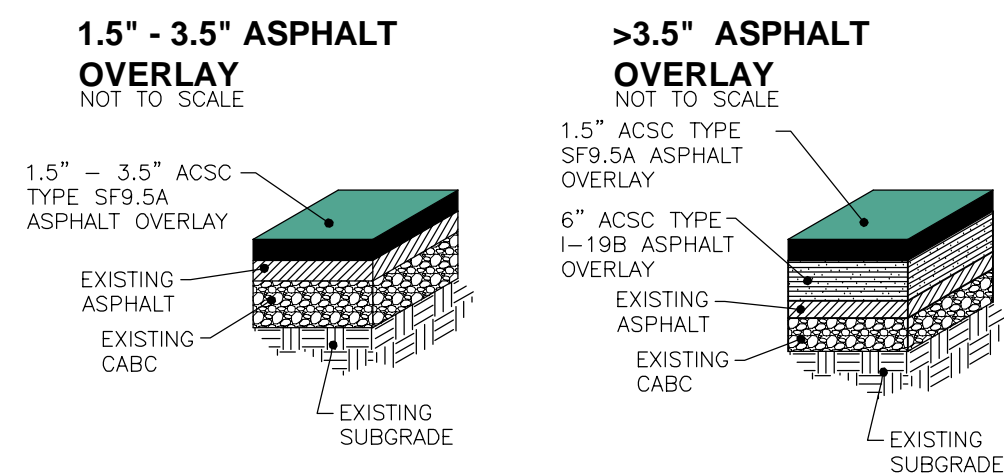
ADJUSTED TOTAL OF NEWLY CONSTRUCTED IMPERVIOUS = 9,502SF + 0.25X1,973 = 9,995SF*

ALLOWABLE NEWLY CONSTRUCTED IMPERVIOUS = 10,000 SF

NOTES:

- ALL PROPOSED SIGNAGE SHALL COMPLY WITH CITY OF WILMINGTON SIGN ORDINANCE.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK.
- ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT, FACE OF CURB, FACE OF BUILDING, OR PROPERTY LINE UNLESS SHOWN OTHERWISE.
- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH CITY OF WILMINGTON, NEW HANOVER COUNTY, AND CAPE FEAR VALLEY PUBLIC UTILITY AUTHORITY AS APPLICABLE.
- THIS SITE IS SERVED BY CAPE FEAR VALLEY PUBLIC UTILITY AUTHORITY.
- THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FDC POINTS, OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN THE WATER METER AND ITS CITY OF WILMINGTON REQUIRED BACKFLOW PREVENTERS.
- REDUCED PRESSURE PRINCIPLE-DETECTOR ASSEMBLIES TO BE INSTALLED ABOVE GROUND WITH INSULATED ENCLOSURE PER CITY REQUIREMENTS. THE FOLLOWING MODEL NUMBERS SHALL BE PROVIDED: 5/8" BACKFLOW=WATTS MODEL 909M10T
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL GRADES PRIOR TO THE START OF CONSTRUCTION.
- MAINTAIN MINIMUM 3' COVER FOR ALL WATER PIPE.
- ALL SANITARY SEWER CLEANOUTS IN PAVEMENT AREAS SHALL BE TRAFFIC RATED.
- ALL P.V.M.T. MARKINGS SHALL BE THERMOPLASTIC WITH THE EXCEPTION OF PARKING STALLS.
- CROSSWALKS SHALL BE 8' WIDE SOLID WHITE THERMOPLASTIC.
- STOP BARS SHALL 4' BEHIND THE CROSSWALK, AND 24" WIDE, SOLID WHITE THERMOPLASTIC.
- MAX. SIDEWALK CROSS-SLOPE IS 2%.
- FINAL SURFACE COARSE SHALL OVERLAP SAWCUT JOINT AND INTERFACE OF ASPHALT OVERLAY AND NEW/EXISTING ASPHALT PAVEMENT. (2' MIN.)
- TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- INSTALL REFLECTORS PER CITY & NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
- PERMEABLE PAVEMENT SHALL NOT BE INSTALLED UNTIL ADJACENT AREAS HAVE BEEN STABILIZED.

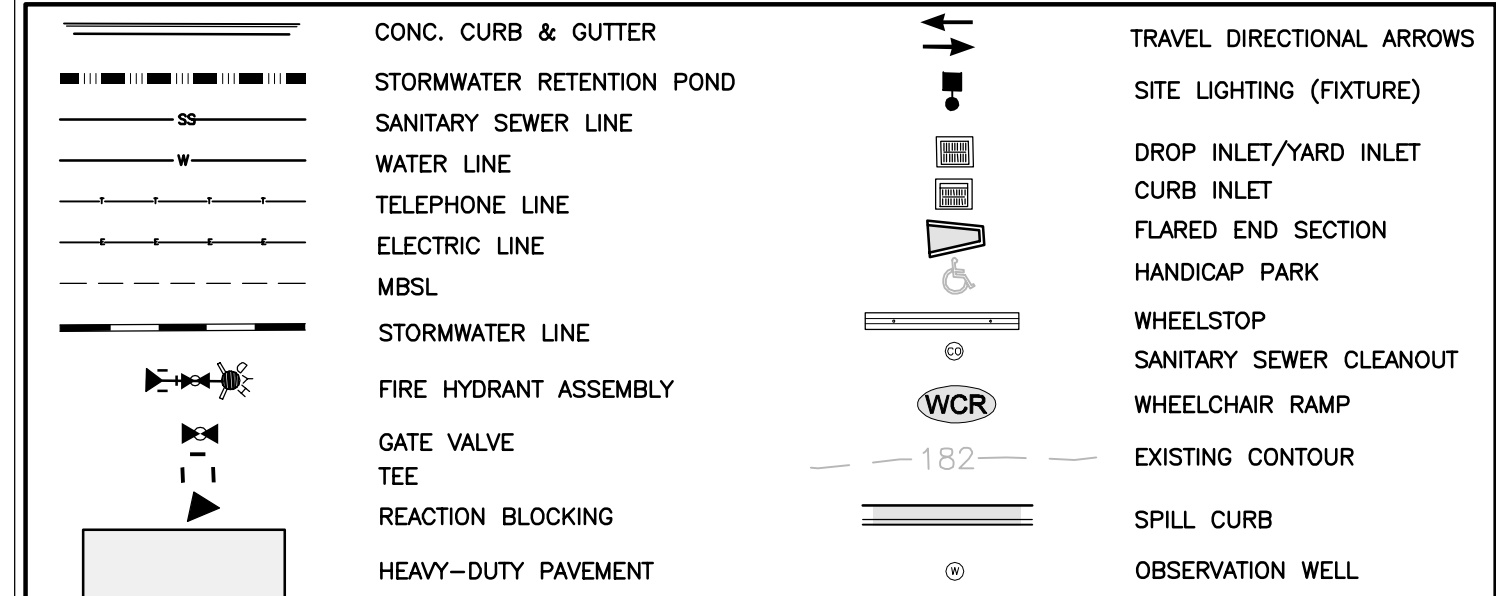
ASPHALT OVERLAY DETAILS



1 C-03 PAVEMENT SECTIONS

SCALE: N.T.S.

SITE / UTILITY LEGEND



Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

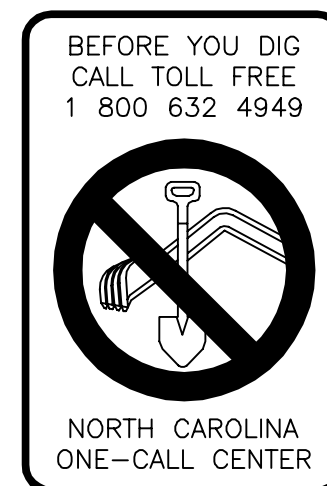
Fire _____



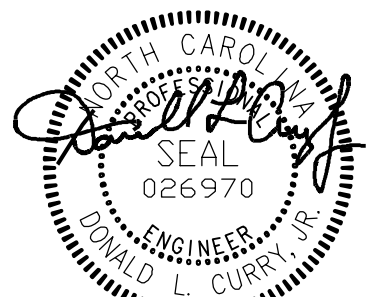
Public Services - Engineering Division
APPROVED DRAINAGE PLAN

Date: _____ Permit # _____

Signed: _____

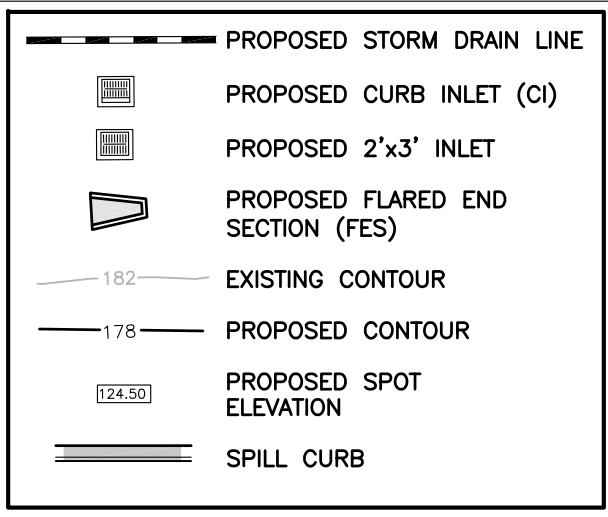


SCALE: 1" = 20'



11/30/12

DRAINAGE LEGEND



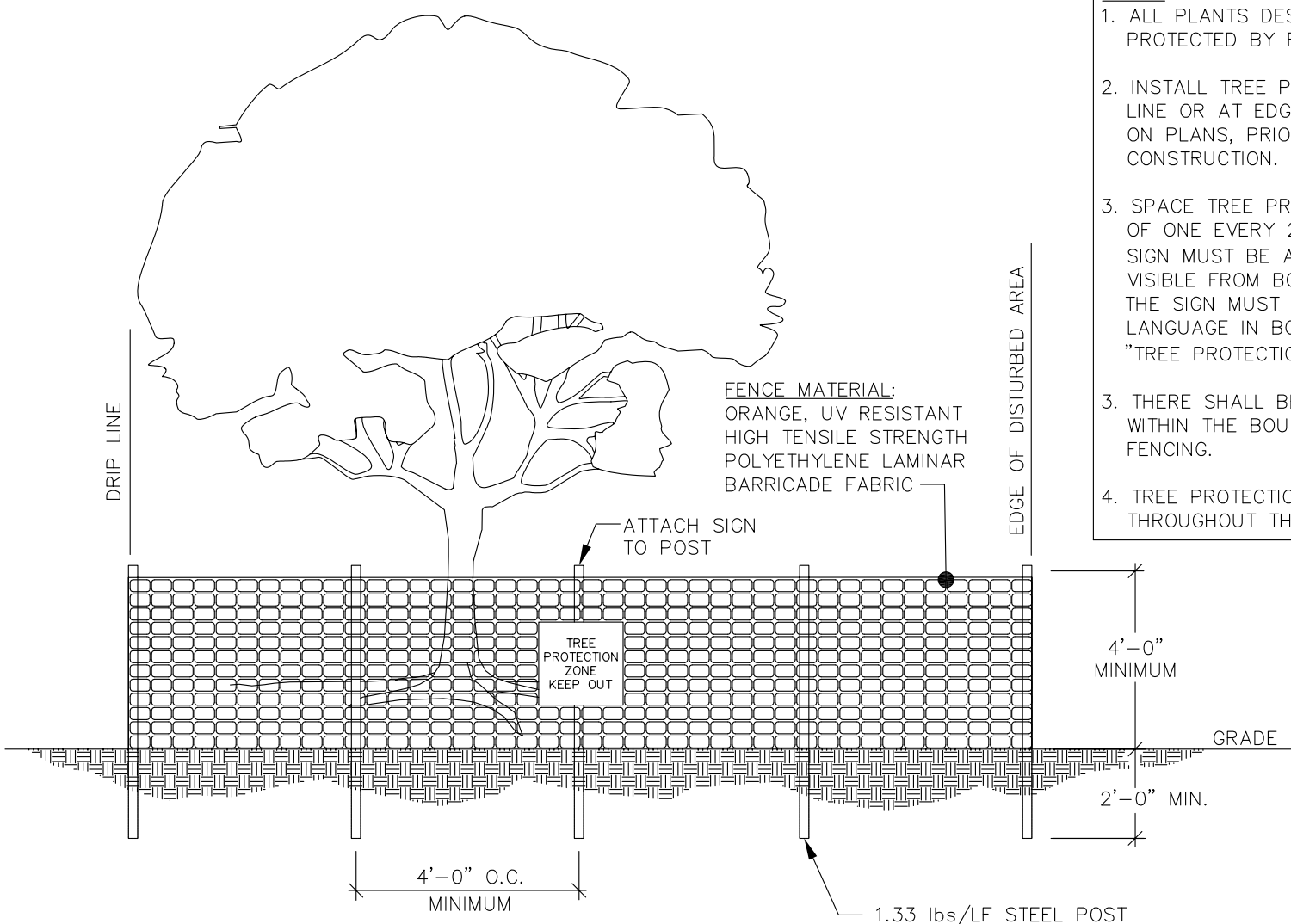
NOTES:

1. ALL STORM DRAINAGE PIPING SHALL BE CLASS III RCP UNLESS NOTED OTHERWISE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCDENR, NEW HANOVER COUNTY, AND CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.
3. CONTRACTOR SHALL COORDINATE ALL GRADING OPERATIONS WITH THE OWNER'S GEOTECHNICAL ENGINEER, AS APPROPRIATE.
4. CONTRACTOR SHALL MAINTAIN POSITIVE SLOPE AND OUTFALL OF ANY FOUNDATION DRAIN SYSTEMS.
5. SPOT ELEVATIONS ON CURB REFER TO THE BACK OR TOP OF CURB (TOC) ELEVATION. ELEVATIONS ON STORM DRAINAGE TABULATIONS (SEE DETAIL SHEET) REFER TO EDGE OF PAVEMENT (EOP) ELEVATION.
6. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL GRADES PRIOR TO THE START OF CONSTRUCTION.
7. PROPOSED BMP COMPLIES WITH NCDENR AND CITY OF WILMINGTON STORMWATER ORDINANCE.
8. MAXIMUM SLOPE OF PERVIOUS CONCRETE SUBGRADE IS 0.50%.

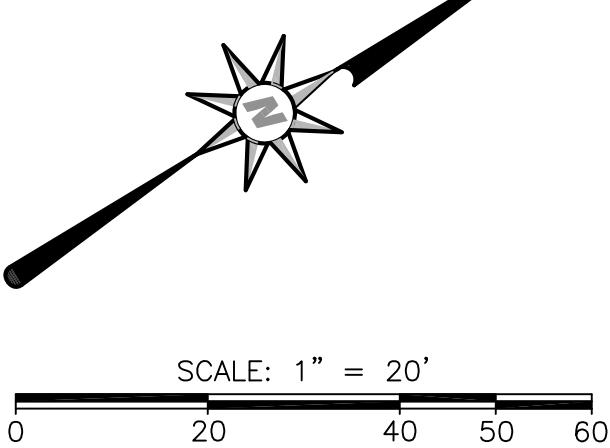
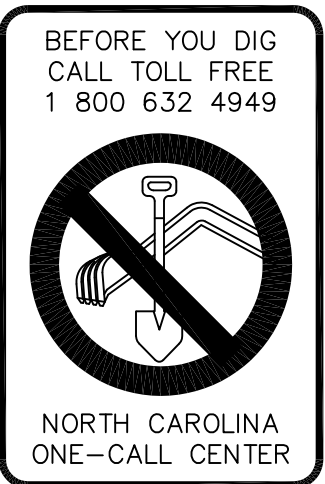
INLET #	CATCH BASIN TYPE	GRATE TYPE	ROADWAY	RIM ELEV (EOP)	PIPE SIZE (in) & INV. IN		PIPE SIZE (in) & INV. OUT	
S1	2'X2' YARD INLET	STD. TOP	SOUTH - YARD INLET	42.14	N/A	N/A	15	39.39
S2	NCDOT STD. 840.02	TYPE 'E'	SOUTH LOT - CURB INLET	42.52	N/A	N/A	15	39.27
S3	2'X2' YARD INLET	STD. TOP	SOUTH - YARD INLET	42.80	#S1 - 15	39.26	15	39.06
S4	NCDOT STD. 840.02	TYPE 'E'	OLEANDER DRIVE - CURB INLET	41.50	#S2 - 15	39.16	15	38.62
N1	2'X2' YARD INLET	STD. TOP	WEST - YARD INLET	41.97	N/A	N/A	8	38.72
N2	NCDOT STD. 840.14	TYPE 'E'	WEST - YARD INLET	42.17	8	37.75	15	37.65
N3	NCDOT STD. 840.14	TYPE 'E'	DUMPSTER PAD - DROP INLET	42.11	15	37.07	15	36.97
EX1	NCDOT STD. 840.14	STD. TOP	NORTH - EXISTING DROP INLET	39.84	N/A	N/A	15	36.32
N4	NCDOT STD. 840.02	TYPE 'E'	NORTH - CURB INLET	40.63	15	36.32	15	36.17
EX2	NCDOT STD. 840.52	STD. TOP	NORTH - MANHOLE	40.80	15	36.17	15	35.71
EX3	NCDOT STD. 840.14	TYPE 'E'	NORTH - EXISTING DROP INLET	41.50	#EX2 - 15	35.71	15	35.66
					#N3 - 15	35.94	15	35.66

NOTES:

1. ALL PLANTS DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING, AS ILLUSTRATED.
2. INSTALL TREE PROTECTION FENCE AT TREE DRIP LINE OR AT EDGE OF DISTURBED AREA, AS SHOWN ON PLANS, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. SPACE TREE PROTECTION ZONE SIGNS A MINIMUM OF ONE EVERY 200 FEET. THE SIZE OF EACH SIGN MUST BE A MINIMUM OF 2' x 2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE. THE SIGN MUST CONTAIN THE FOLLOWING LANGUAGE IN BOTH ENGLISH & SPANISH: "TREE PROTECTION AREA - DO NOT ENTER".
3. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
4. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.



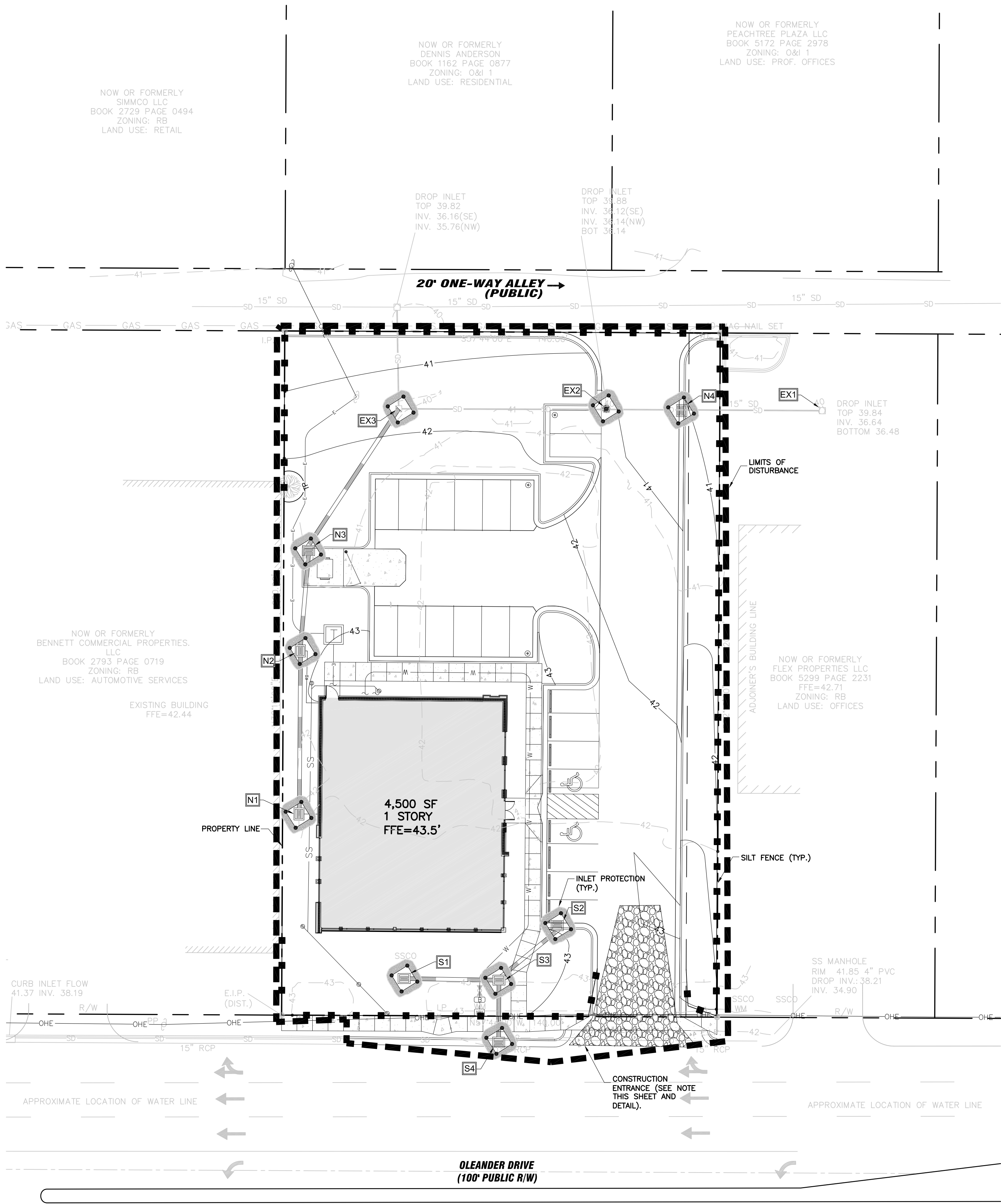
1
C-05
TREE PROTECTION FENCE
SCALE: N.T.S.



11/30/12

MATTRESS FIRM - WILMINGTON, NC
GRADING/DRAINAGE PLAN

The Curry Engineering Group, PLLC
C-05



EROSION CONTROL NOTES:

1. THE TEMPORARY DIVERSION DITCHES, SILT FENCE, AND LIMITS OF DISTURBANCE SHOWN ON THIS PLAN ARE GRAPHICAL REPRESENTATIONS OF THE ACTUAL EROSION CONTROL MEASURES THAT WILL BE INSTALLED UNDER THIS PROJECT. DO TO THE SCALE OF THIS DRAWING, THESE MEASURES ARE GRAPHICALLY DEPICTED BEYOND WHERE THEY WILL ACTUALLY BE INSTALLED IN THE FIELD.
2. DIST AREA = 0.71 AC
3. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN IN THE PLAN IS A VIOLATION OF THE NEW HANOVER COUNTY EROSION CONTROL ORDINANCE & IS SUBJECT TO A FINE.
4. GRADING MORE THAN 1 ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE NEW HANOVER COUNTY EROSION CONTROL ORDINANCE & IS SUBJECT TO A FINE.
5. ALL AREAS MUST BE SEEDED & MULCHED WITHIN 14 CALENDAR DAYS. REFER TO EROSION CONTROL DETAILS AND EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
6. CONSTRUCTION ENTRANCE SHALL BE INSTALLED OVER EXISTING ASPHALT PAVEMENT THAT WILL BE OVERLAYED PRIOR TO PROJECT COMPLETION. CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING ASPHALT. PLACE 1' OF SOIL OVER EXISTING ASPHALT FOLLOWED BY A GEOSYNTHETIC LINER AND THEN A MIN. 6" OF COARSE AGGREGATE.

EROSION CONTROL LEGEND

LIMITS OF DISTURBED AREA

CONSTRUCTION ENTRANCE

SILT FENCE

BLOCK & GRAVEL INLET PROTECTION

Approved Construction Plan

Name _____ Date _____

Planning _____

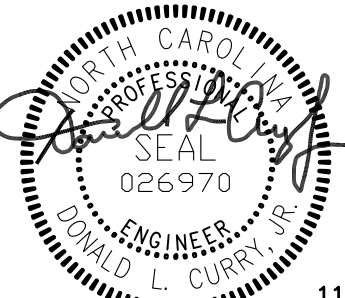
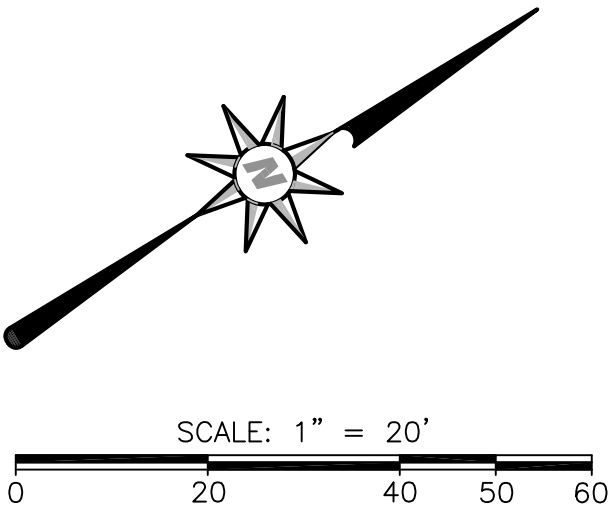
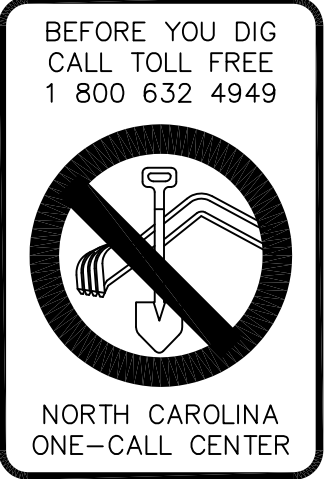
Traffic _____

Fire _____

City of Wilmington
Public Services • Engineering Division
APPROVED DRAINAGE PLAN

Date: _____ Permit # _____

Signed: _____



11/30/12

REVISIONS		DATE	BY	DESCRIPTION
1	10/18/12			COW/CE/EA COMMENTS
2	11/20/12			COW 2ND REVIEW COMMENTS
DATE: September, 2012				
FILE NO. 2012-022				
HORIZ. SCALE: 1" = 20'				
VERT. SCALE: 1" = 20'				
SHEET SIZE: 24 x 36				

MATTRESS FIRM - WILMINGTON, NC

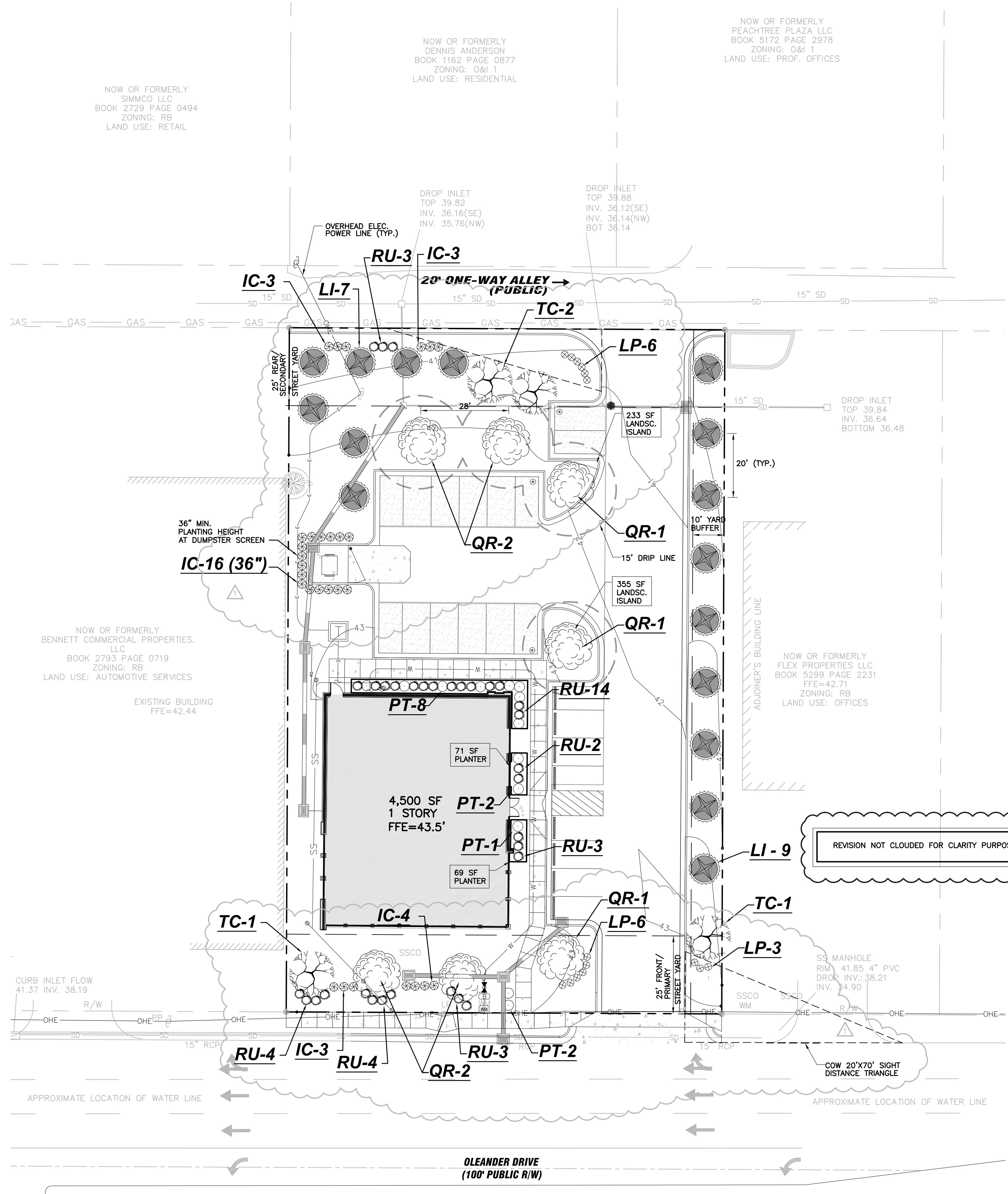
EROSION CONTROL PLAN

PO BOX 2018
FLORENCE, NC 27536
PHONE: (919) 552-0819
FAX: (919) 552-0820
MOBILE: (919) 888-4857
NC LIC. NO. P-0709

The Curry Engineering
Group, PLLC

www.curryengineeringgroup.com doncurry@curryengineeringgroup.com

C-06



2

NOTES:

1. LANDSCAPING SHALL COMPLY WITH THE CITY OF WILMINGTON LANDSCAPING ORDINANCE.
2. ALL DISTURBED AREAS NOT IDENTIFIED FOR PLANTINGS AND MULCH SHALL BE SEEDED. SEE DETAIL SHEETS FOR REQUIREMENTS.
3. FOR ALL EVERGREEN AND CANOPY TREES, THE MIN. CALIPER INCHES AT PLANTING IS 2".
4. MINIMUM HEIGHT FOR SHRUBS AT THE DUMPSTER SCREEN IS 36"
5. ALL PLANTED AND RETAINED LIVING MATERIAL, REQUIRED TO MEET THE CITY OF WILMINGTON LANDSCAPING REGULATIONS SHALL BE PERPETUALLY PROTECTED AND MAINTAINED TO PROFESSIONALLY ACCEPTED STANDARDS BY JOINT AND SEVERAL RESPONSIBILITY OF THE OWNER, OCCUPANT, TENANT, AND RESPECTIVE AGENTS OF THE PROPERTY ON WHICH THE MATERIAL IS LOCATED.
6. IF AN IRRIGATION SYSTEM IS INSTALLED IT SHALL BE EQUIPPED WITH A RAIN AND FREEZE SENSOR.
7. NO OBSTRUCTION SHALL BE PERMITTED BETWEEN 30" AND 10' HIGH WITHIN THE SIGHT DISTANCE TRIANGLES.

KEY	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT
TREES						
TC	4	Tilia cordata	Little Leaf Linden	Decid.	2" c	Min. 8'
QR	7	Quercus robur x Q. alba chrymschmidt	Crimson Spire Oak	Decid.	2" c	Min. 8'
LI	16	Lagerstroemia indica	Crape Myrtle	Decid.	2" c	Min. 6'
SHRUBS						
IC	13	Ilex cornuta	Burford Holly	Evergm.	18"	Min. 18"
IC (36")	16	Ilex cornuta	Burford Holly	Evergm.	36"	Min. 36"
LP	15	Loropetalum chinensis 'daruma'	Loropetalum Dwarf	Decid.	18"	Min. 18"
PT	13	Pittosporum tobira	Pittosporum	Evergm.	18"	Min. 18"
RU	33	Rhaphiolepis Indica	Indian Hawthorne	Evergm.	18"	Min. 18"

LANDSCAPE LEGEND:

- LITTLE LEAF LINDEN (TC)
- CRIMSON SPIRE OAK (QR)
- CRAPE MYRTLE (LI)
- PITTOSPORUM (PT)
- INDIAN HAWTHORNE (RU)
- BURFORD HOLLY (IC)
- LOROPETALUM DWARF (LP)
- TREE PROTECTION FENCE

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

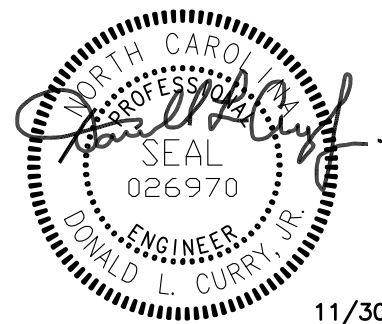
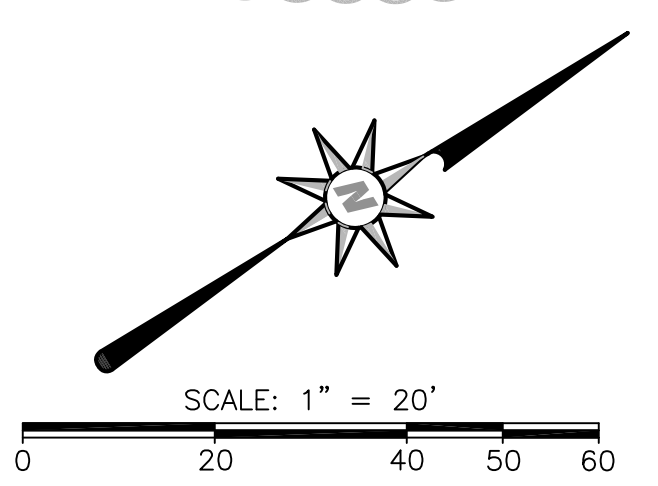


Date: _____ Permit # _____

Signed: _____

LANDSCAPING CALCULATIONS:

1. PRIMARY STREETYARD (OLEANDER DR.)
SEC. 18-477
REQUIRED (PER 600 SF) = 1 CANOPY/SHADE TREE, 6 SHRUBS
TOTAL SF (SOUTH) = 2,875 (115' X 25')
REQUIRED - 5 CANOPY TREES, 29 SHRUBS
PROVIDED - 5 CANOPY TREES, 29 SHRUBS
2. SECONDARY STREETYARD (ALLEY)
SEC. 18-477G
REQUIRED (PER 600 SF) = 1 CANOPY/SHADE TREE, 6 SHRUBS, OR 3 SMALLER SHADE TREES IF THERE IS A CONFLICT WITH OVERHEAD POWER LINES.
TOTAL SF = 1,438 (0.5 X 115' X 25')
REQUIRED - 3 CANOPY TREES, 15 SHRUBS
PROVIDED - 2 LARGE CANOPY TREES, 4 SHADE TREES, 15 SHRUBS
3. FOUNDATION PLANTINGS:
SEC. 18-490
REQUIRED PLANTING AREA = 12% * AREA OF BUILDING FACE ADJACENT TO PARKING / DRIVE ISLE. = 0.12 * 23'H * 135LF
REQUIRED PLANTING AREA = 373 SF
PLANTING AREA PROVIDED = 127'L * 5'W = 635SF
4. INTERIOR LANDSCAPING:
SEC. 18-481
*PARKING FACILITY SHALL BE SHADED BY CANOPY TREES TO PROVIDE TWENTY PERCENT OR GREATER AT MATURITY.
*PROVIDE AT LEAST ONE TREE PER 12'X18' PLANTING ISLANDS
*AT LEAST 75% OF TREES PROVIDED UNDER INTERIOR LANDSCAPING SHALL BE A LARGE SHADE/CANOPY SPECIES.
*MAX DISTANCE FROM A SHADE TREE TO A PARKING SPACE = 120'
PARKING LOT AREA = 10,684SF
REQUIRED COVERAGE (20%) = 0.20 * 10,684SF = 2,137SF
PROVIDED COVERAGE = 4 TREES * 707SF/EA = 2,828SF
5. PERIMETER LANDSCAPING:
SEC. 18-482
*PROVIDE A MINIMUM OF ONE TREE EVERY EIGHTEEN TO TWENTY SEVEN FEET.
6. MITIGATION REQUIREMENTS:
SEC. 18-460
*WITHIN 12" BLACK CHERRY TREE AT 50% PER TABLE IV
*REQUIRED MITIGATION [# OF TREES] = [DBH REMOVED X (2X50%)]/3
*REQUIRED MITIGATION = [12" X (2X50%)]/3 = 4 TREES
*MITIGATION PROVIDED = 4 CRAPE MYRTLES NORTH OF DUMPSTER
7. OVERALL SITE REQUIREMENT
REQUIRED = 15 TREES/ACRE = 0.71*15=11 TREES
PROVIDED = 27 TREES



11/30/12

MATTRESS FIRM - WILMINGTON, NC
LANDSCAPING PLAN

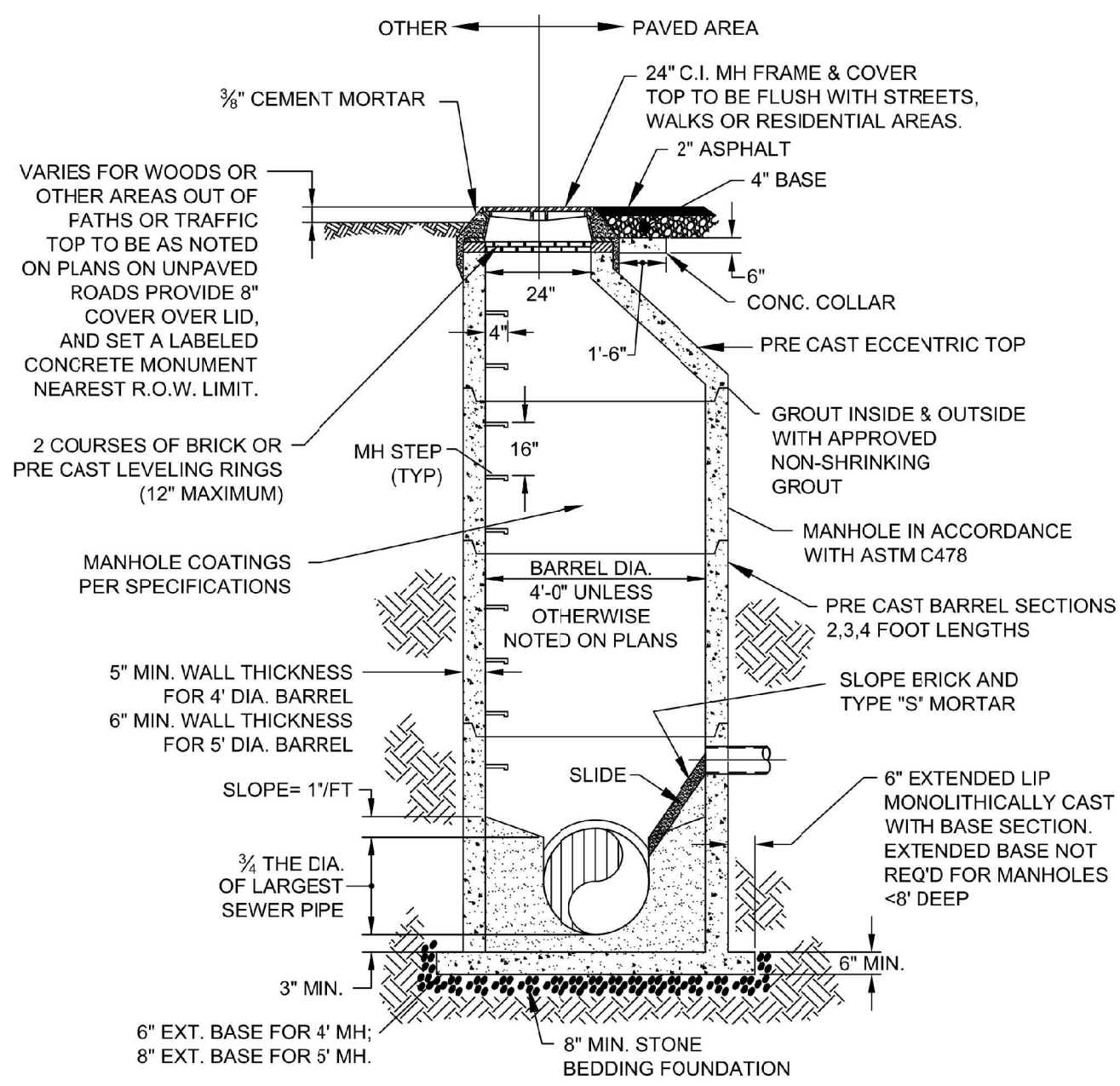
The Curry Engineering Group, PLLC

PO BOX 2018
FLORENCE, NC 27536
PHONE: (919) 552-0819
FAX: (919) 552-0820
MOBILE: (919) 888-4857
NC LIC. NO. P-0799

C-07

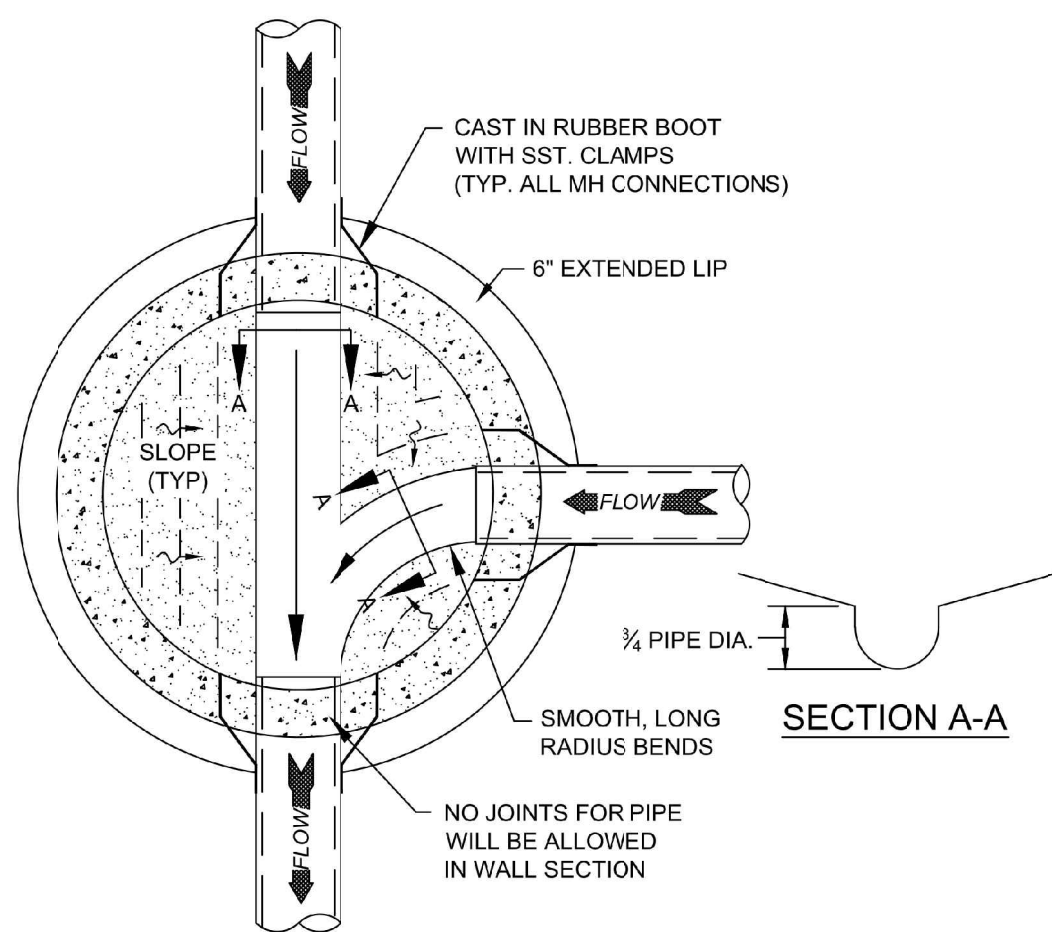
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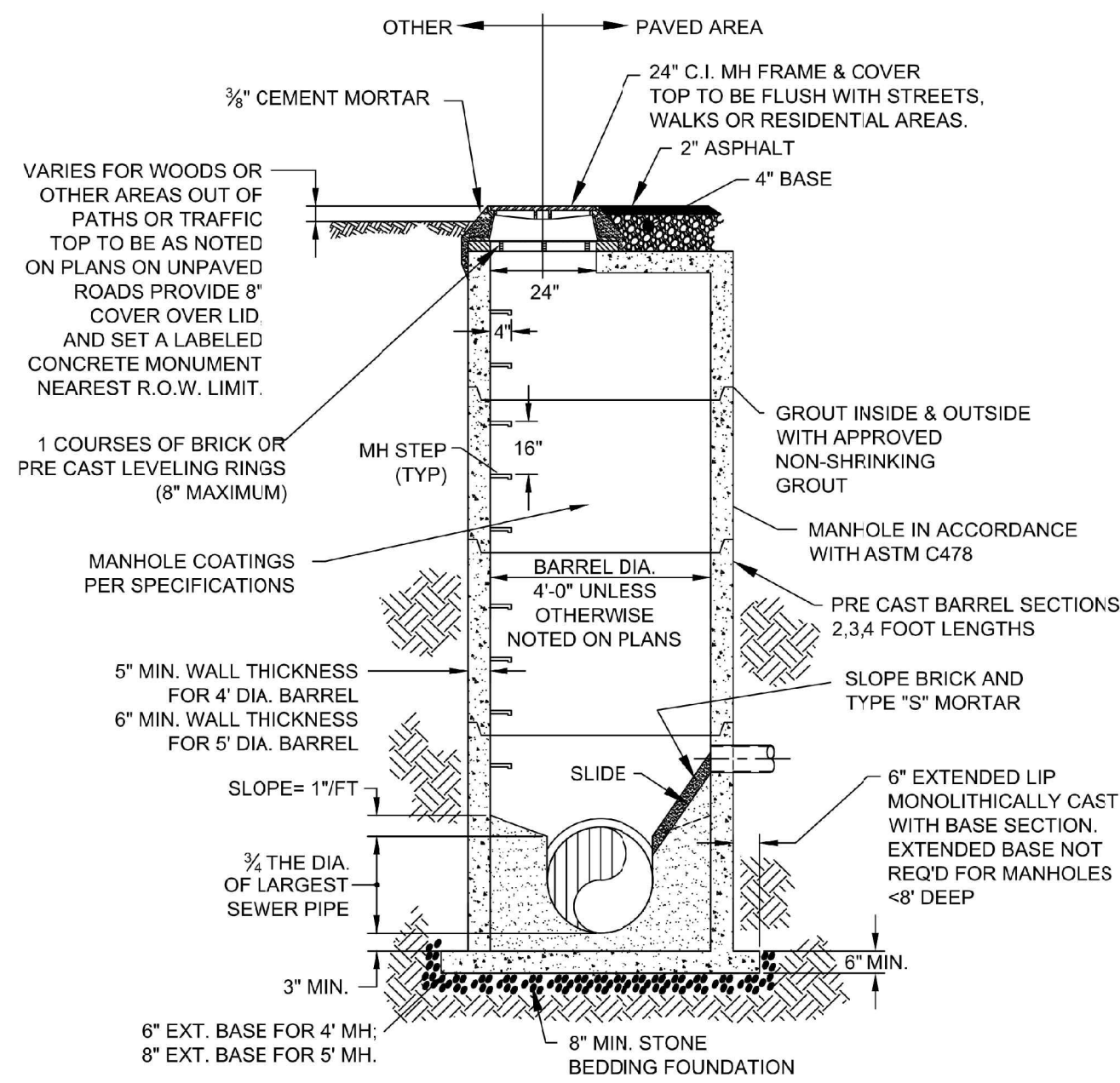
PRECAST CONCRETE OFFSET MANHOLE TYPICAL

(LESS THAN 30" DROP)



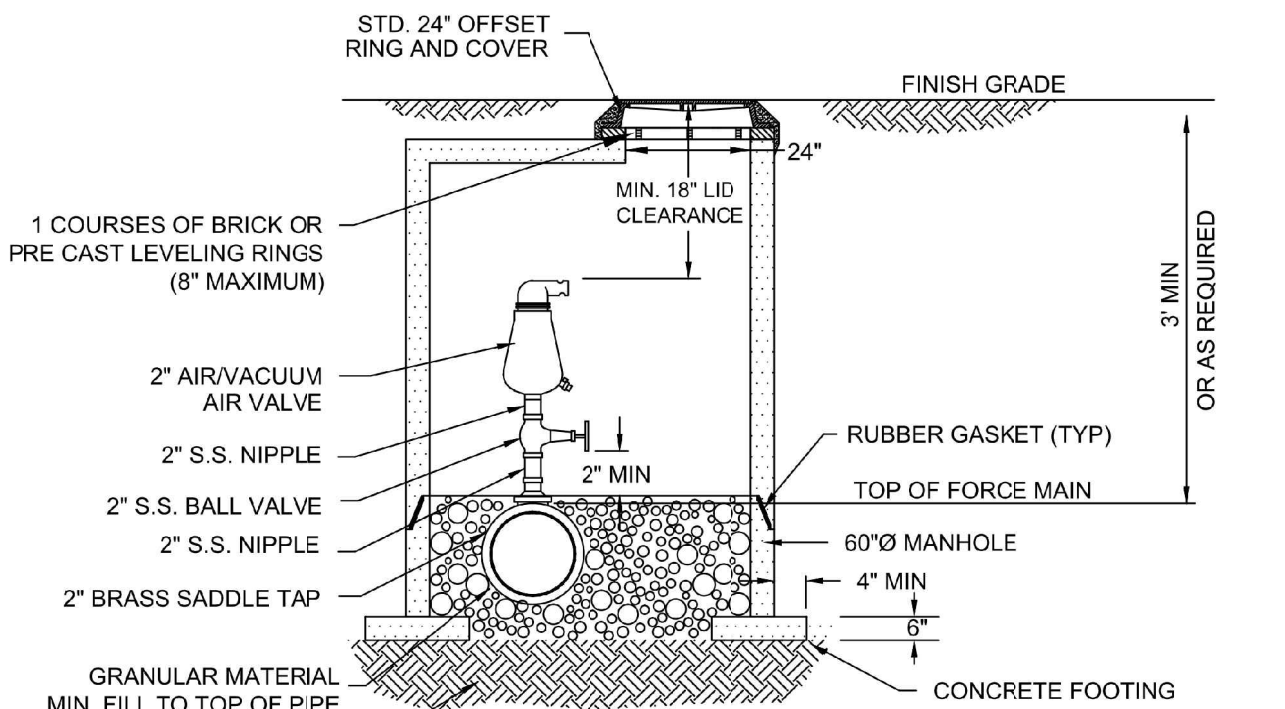
MANHOLE FLOOR PLAN

NOT TO SCALE



PRECAST CONCRETE FLAT TOP MANHOLE TYPICAL

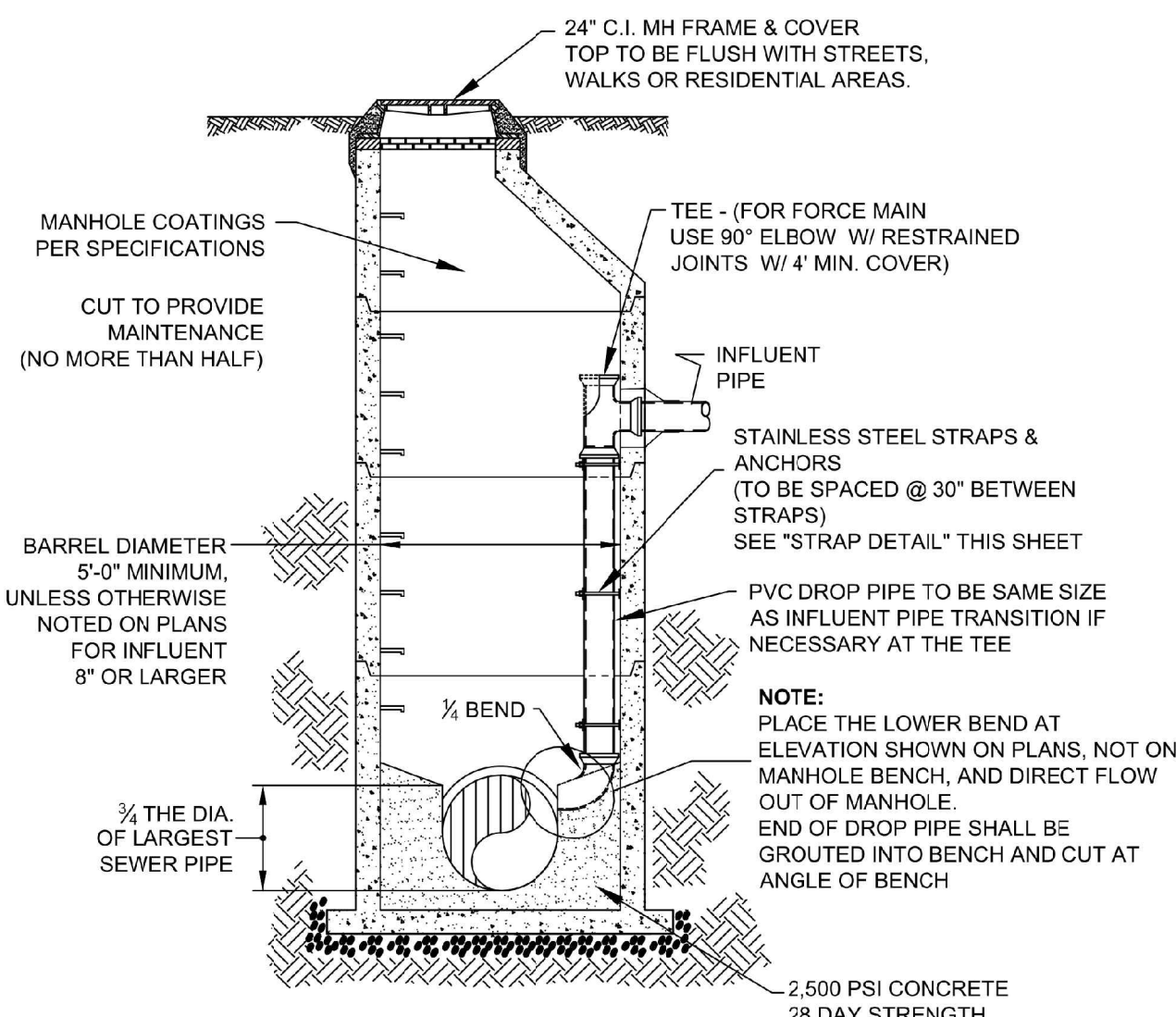
(LESS THAN 30" DROP)



AIR / VACUUM AND AIR
RELEASE COMBINATION VALVE

NOT TO SCALE

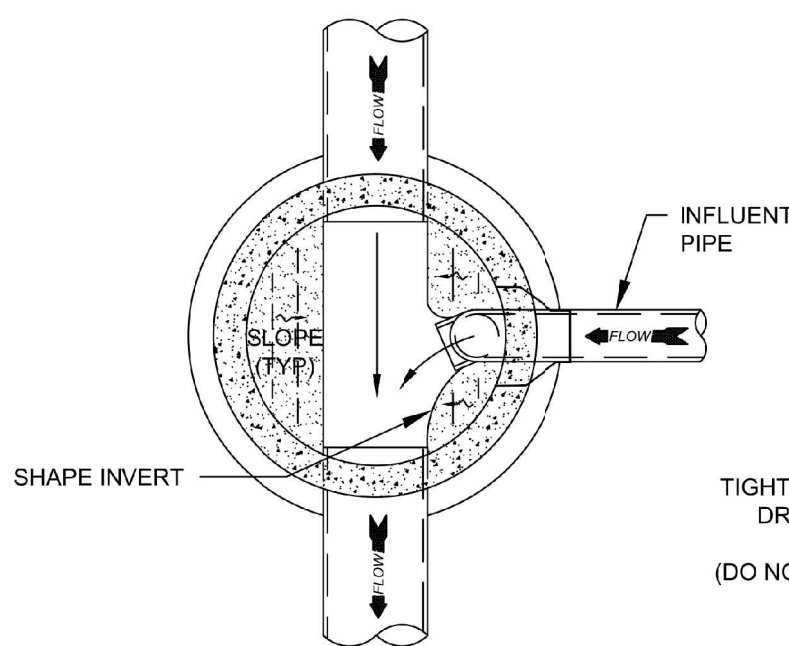
- NOTES:
1. CONTRACTOR TO INSTALL VALVE & MANHOLE AT SUFFICIENT DEPTH TO ALLOW FOR ACCESS.
 2. FORCE MAIN TO BE OFFSET IN MANHOLE.
 3. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.
 4. USE SOLID BASE IN AREAS WITH HISTORICALLY HIGH GROUNDWATER (WITHIN 2' OF FORCE MAIN INVERT).



DROP MANHOLE

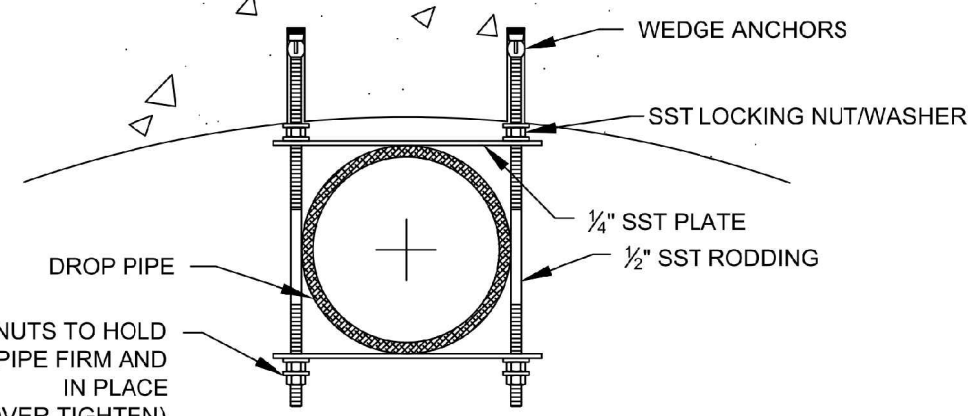
(MORE THAN 30" DROP)

NOT TO SCALE



DROP MANHOLE FLOOR PLAN

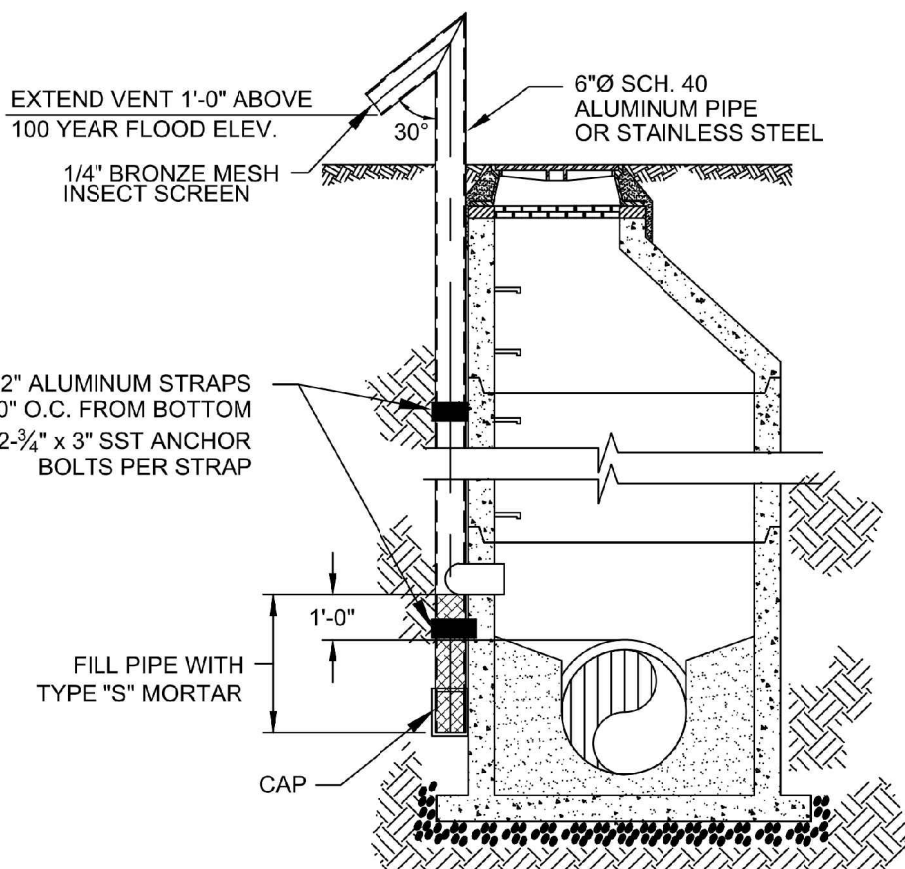
NOT TO SCALE



NOTE: ALL PARTS TO BE SST.

STRAP DETAIL

NOT TO SCALE



STANDARD VENT MANHOLE

NOT TO SCALE

1. SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
2. SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT R/W LINE. SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
3. ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF GLASS 50, DIP. WITH PROTECTO 401 CERAMIC EPOXY LINING.
4. MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
5. NO FLEXIBLE COUPLINGS SHALL BE USED.
6. ALL STAINLESS STEEL FITTINGS SHALL BE 3/16".

STANDARD SEWER NOTES

(REQUIRED ON ALL SEWER PLAN AND PROFILE SHEETS)

GENERAL NOTES:

1. NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
3. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
4. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
5. THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN & STOCKPILE AREAS (TO ARRANGE AND INSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

THE DETAILS SHOWN HEREON SUPERCEDE CFPUA
WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

SANITARY SEWER
STANDARD DETAILS

SANITARY SEWER STANDARD DETAILS
SS-1



CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

Stewardship. Sustainability. Service.

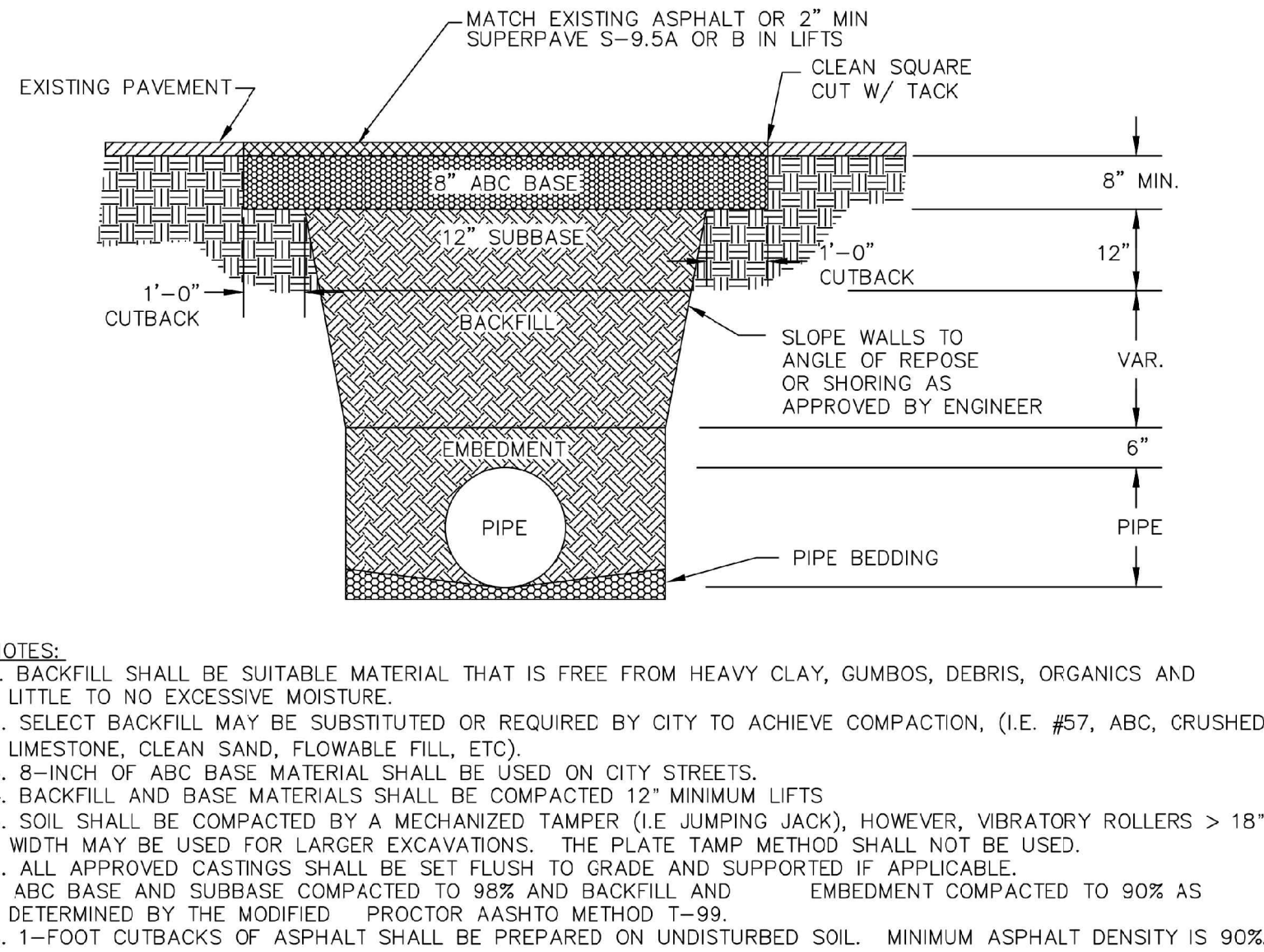
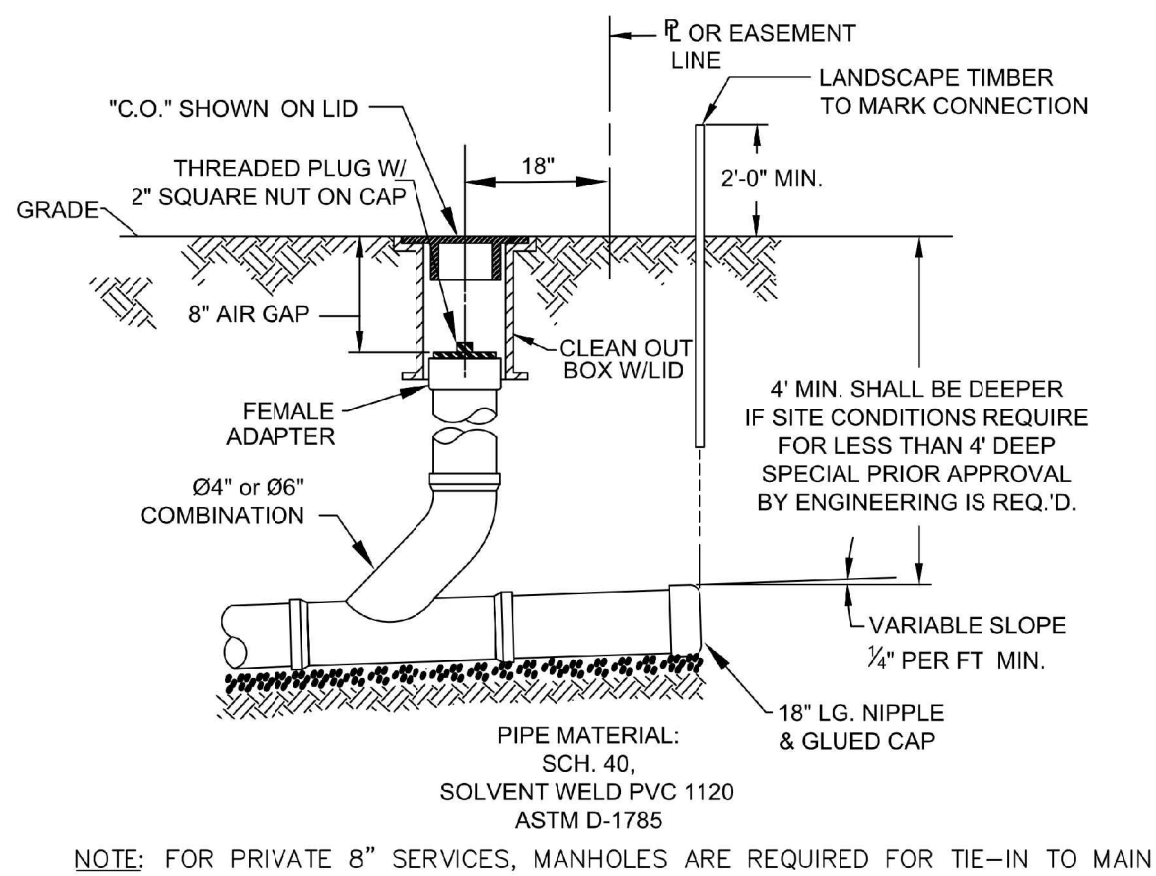
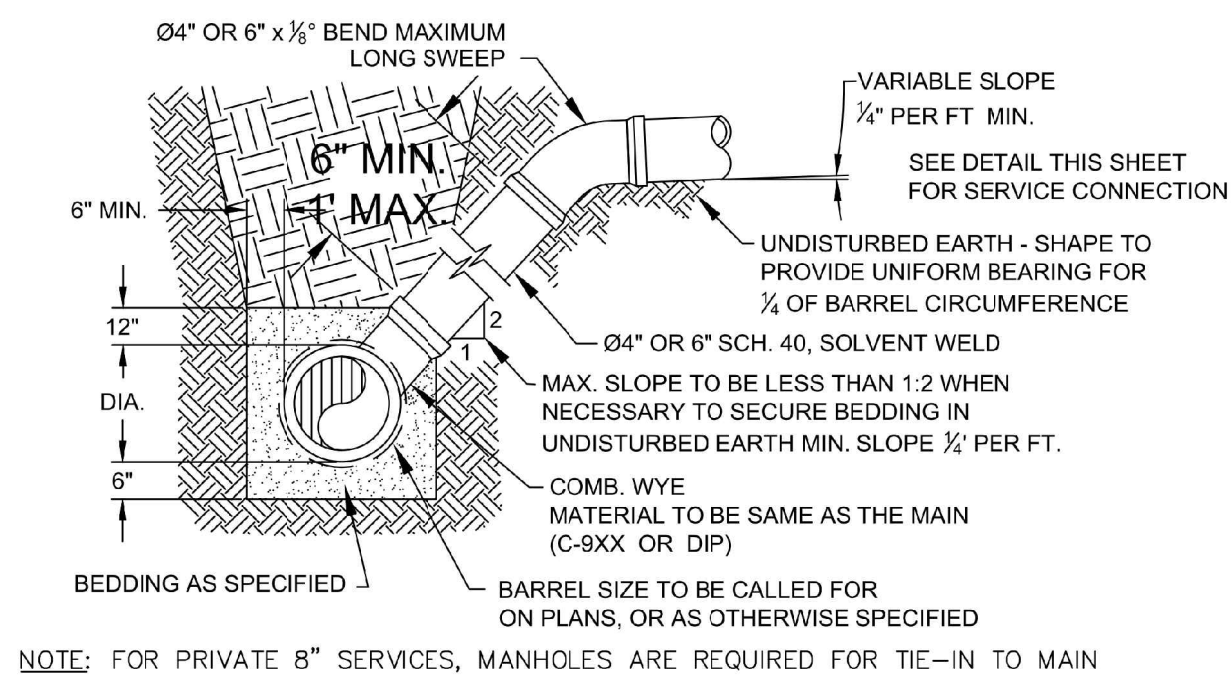
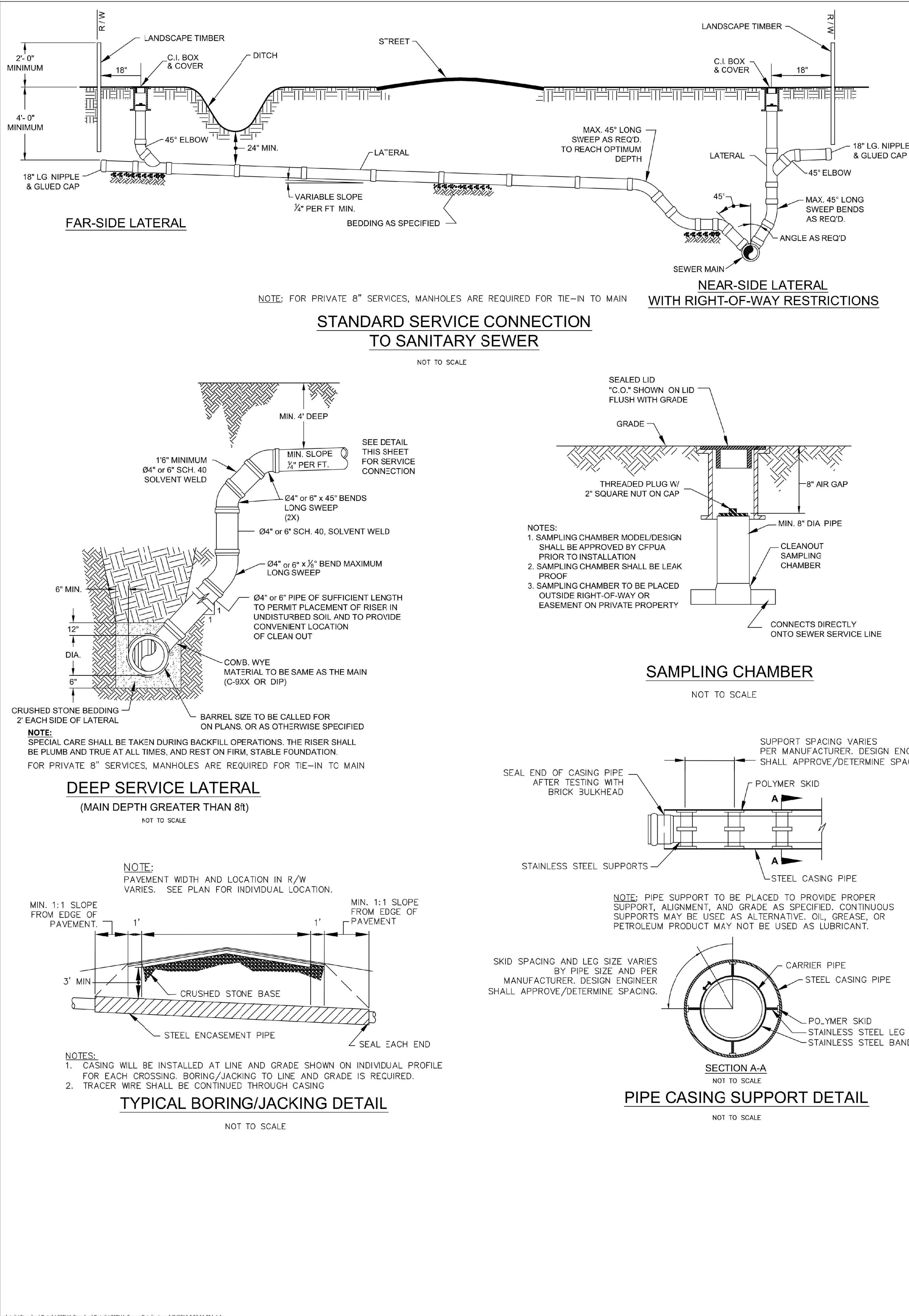
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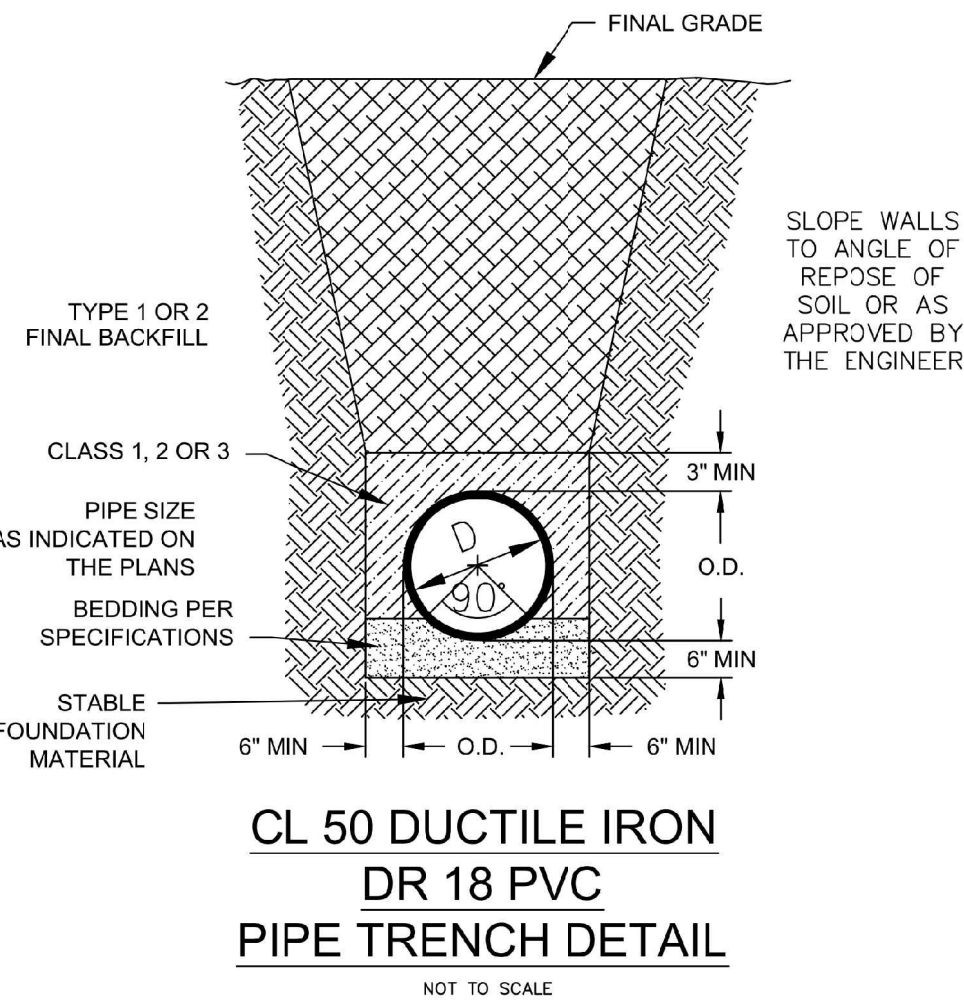
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1	10/18/12	COW/CFPUA COMMENTS	
2	11/30/12	COW 2ND REVIEW COMMENTS	
DATE: SEPTEMBER, 2012		FILE NO.	2012-022
HOBZ SCALE: N/A		ORG. SHEET SIZE: 24 x 36	

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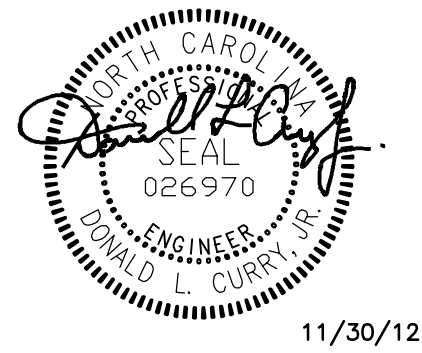
PAVEMENT REPAIR WHERE PIPE INSTALLED
(FOR PRIVATE ROADS AND PAVED AREAS;
CONTRACTOR TO MEET MIN. REQUIREMENTS AS DEFINED BY
RIGHT-OF-WAY OWNER FOR PUBLIC ROAD REPAIRS)
NOT TO SCALE



- GENERAL NOTES:**
1. NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
 2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
 3. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
 4. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
 5. THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN & STOCKPILE AREAS (TO ARRANGE AND INSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

**THE DETAILS SHOWN HEREON SUPERCEDE CFPUA
WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04**

REV:	DESCRIPTION:	DATE:
1	RESPONSE TO CFPUA COMMENTS DATED 10/03/12	10/18/12
2	COW 2ND REVIEW COMMENTS	11/30/12



SANITARY SEWER STANDARD DETAILS

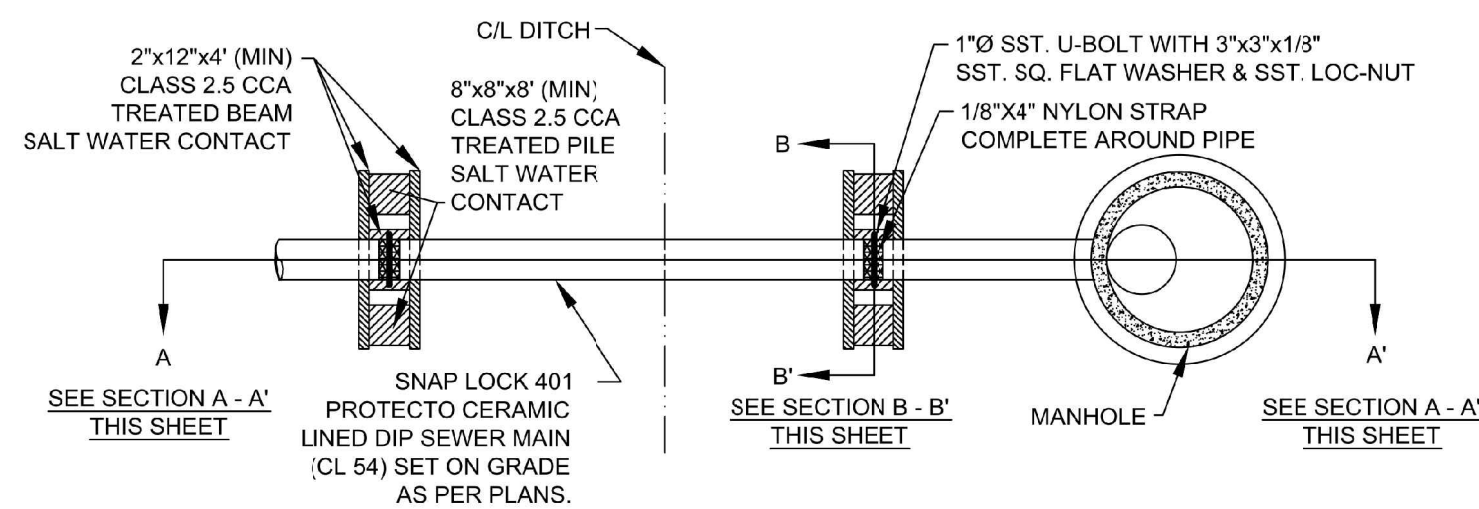
SANITARY SEWER STANDARD DETAILS SS-2



CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

DATE:
1/9/12
SCALE:
N/A
DRAWN BY:
CFPUA
CHECKED BY:
CFPUA
PROJECT NO.:

SHEET NO:
2
4

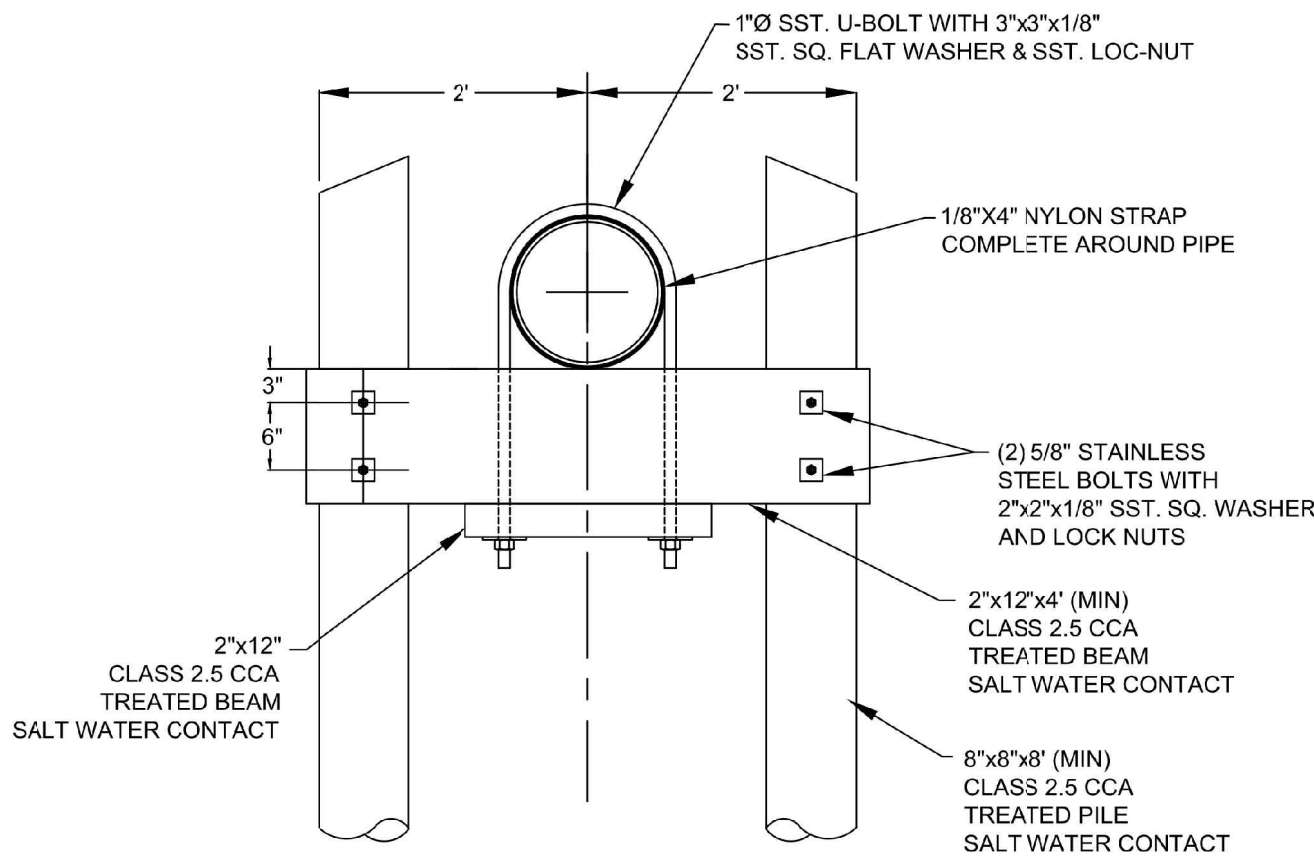


NOTES:

- (1) PILES AND PILE DRIVING SHALL CONFORM TO NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, JANUARY 2002, SECTIONS 445, 450, 1082-2 & 1084-2
- (2) CENTERLINE OF BOLTS TO BE A MINIMUM OF 3" FROM OUTSIDE EDGE OF TIMBER. BOLTS TO BE A MINIMUM OF 3" CENTERLINE TO CENTERLINE
- (3) ALL STAINLESS STEEL SHALL BE 316. STAINLESS STRAP TO BE COLD FORMED.
- (4) PILE SHALL NOT OBSTRUCT FLOW OR CAUSE EROSION OF DITCH/STREAM BANK.
- (5) MIN. CLASS 54 DIP-ENGINEER MUST DESIGN LOADING.
- (6) DESIGN SHALL BE APPROVED BY CFPUA

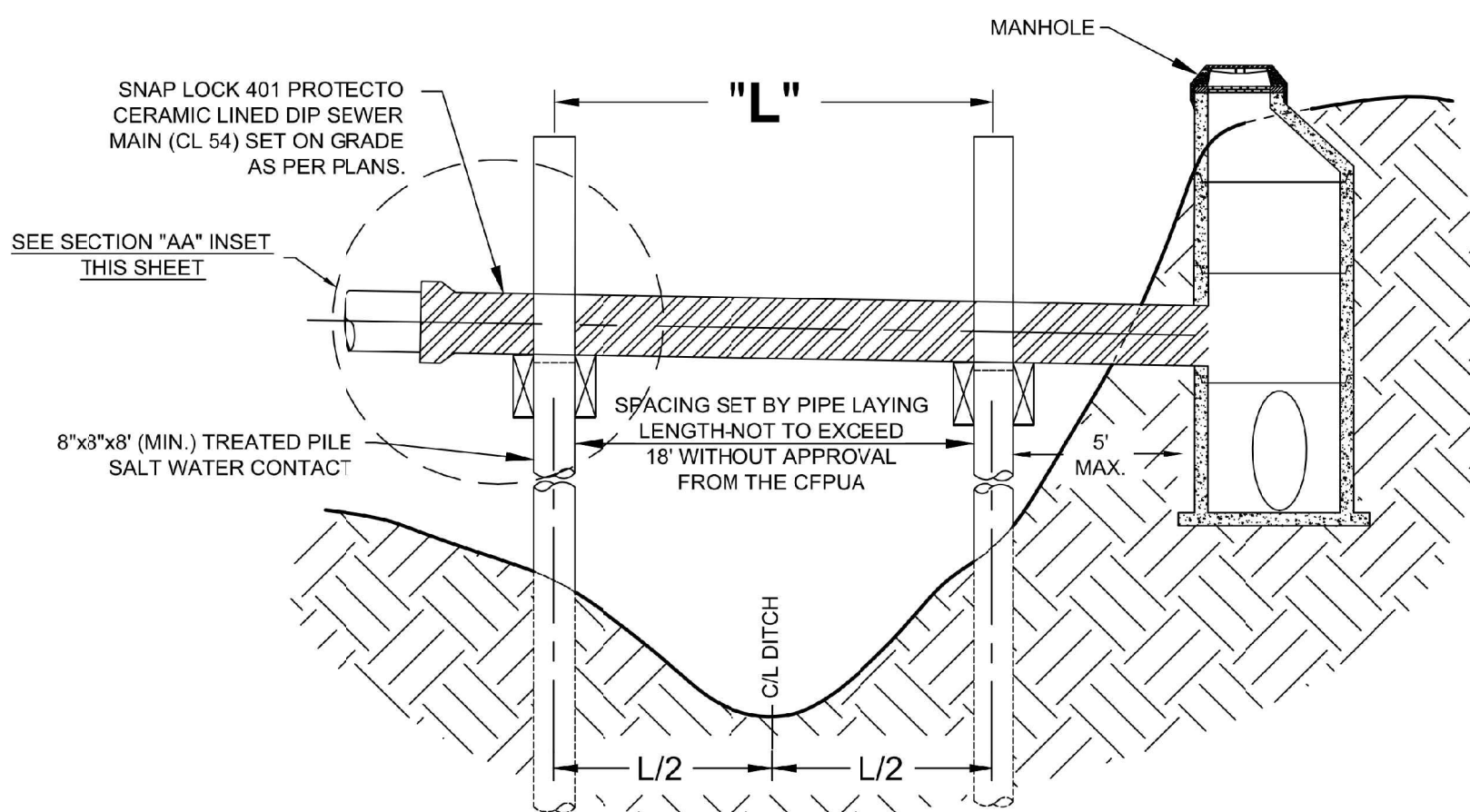
PILE AND BENT

NOT TO SCALE



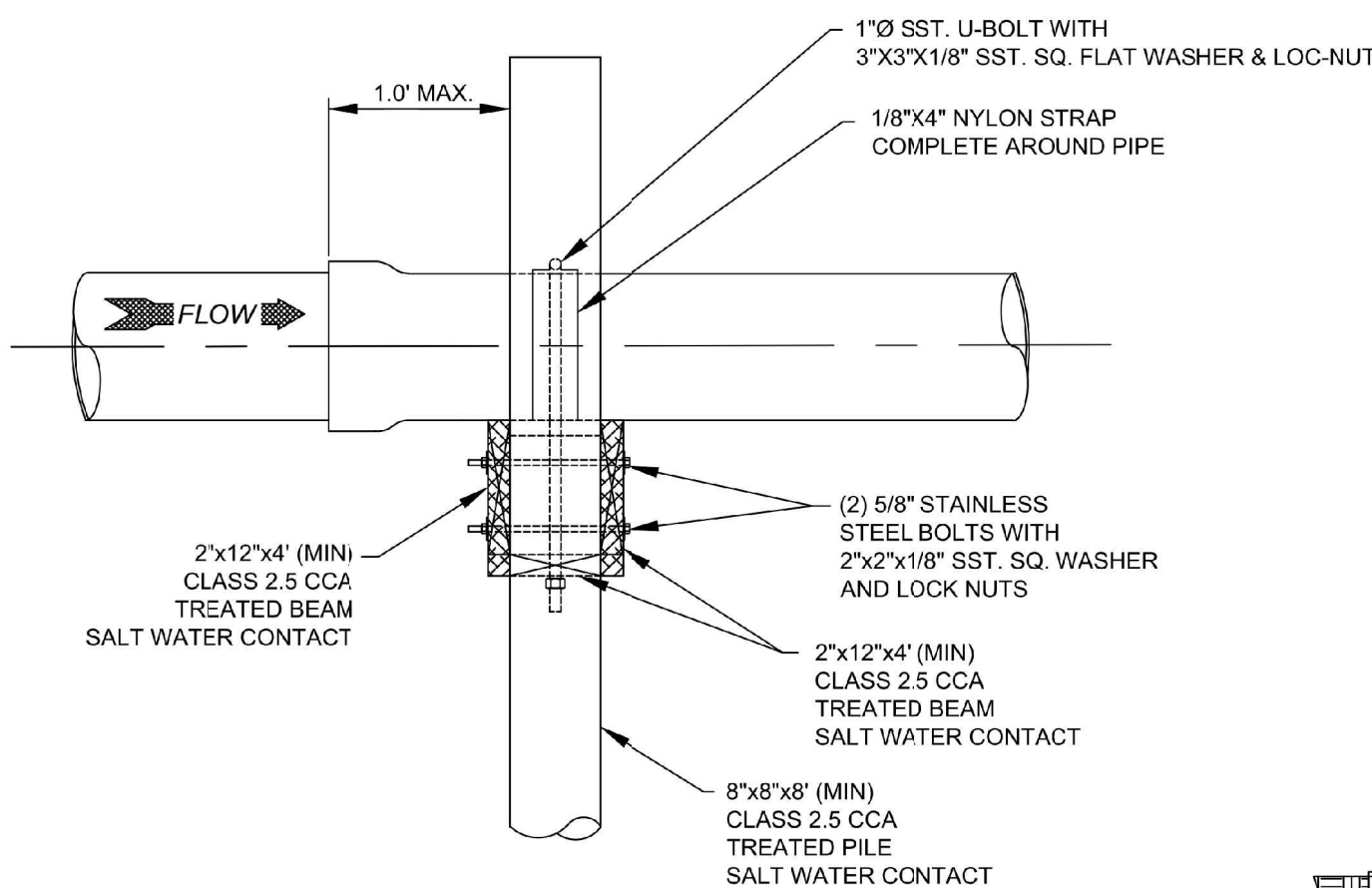
PILE AND BENT SECTION B - B'

NOT TO SCALE



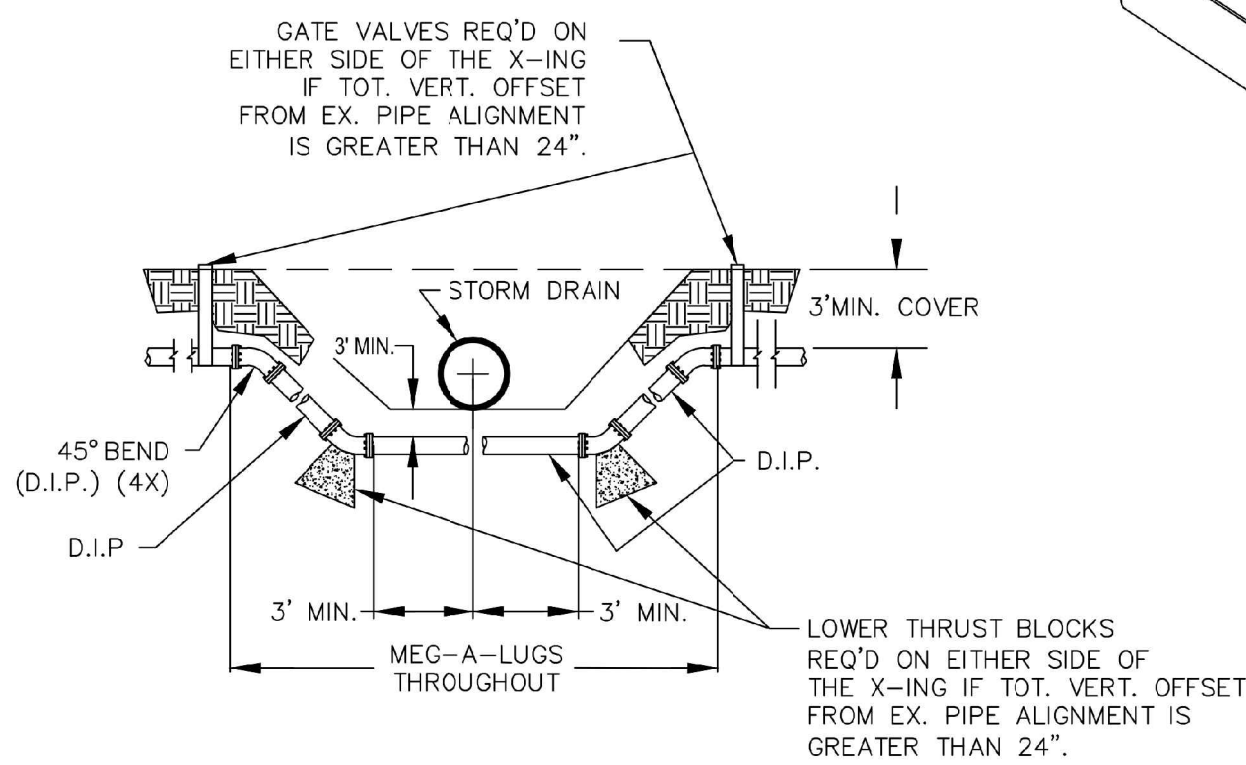
PILE AND BENT SECTION A - A'

NOT TO SCALE



PILE AND BENT SECTION A - A' INSET

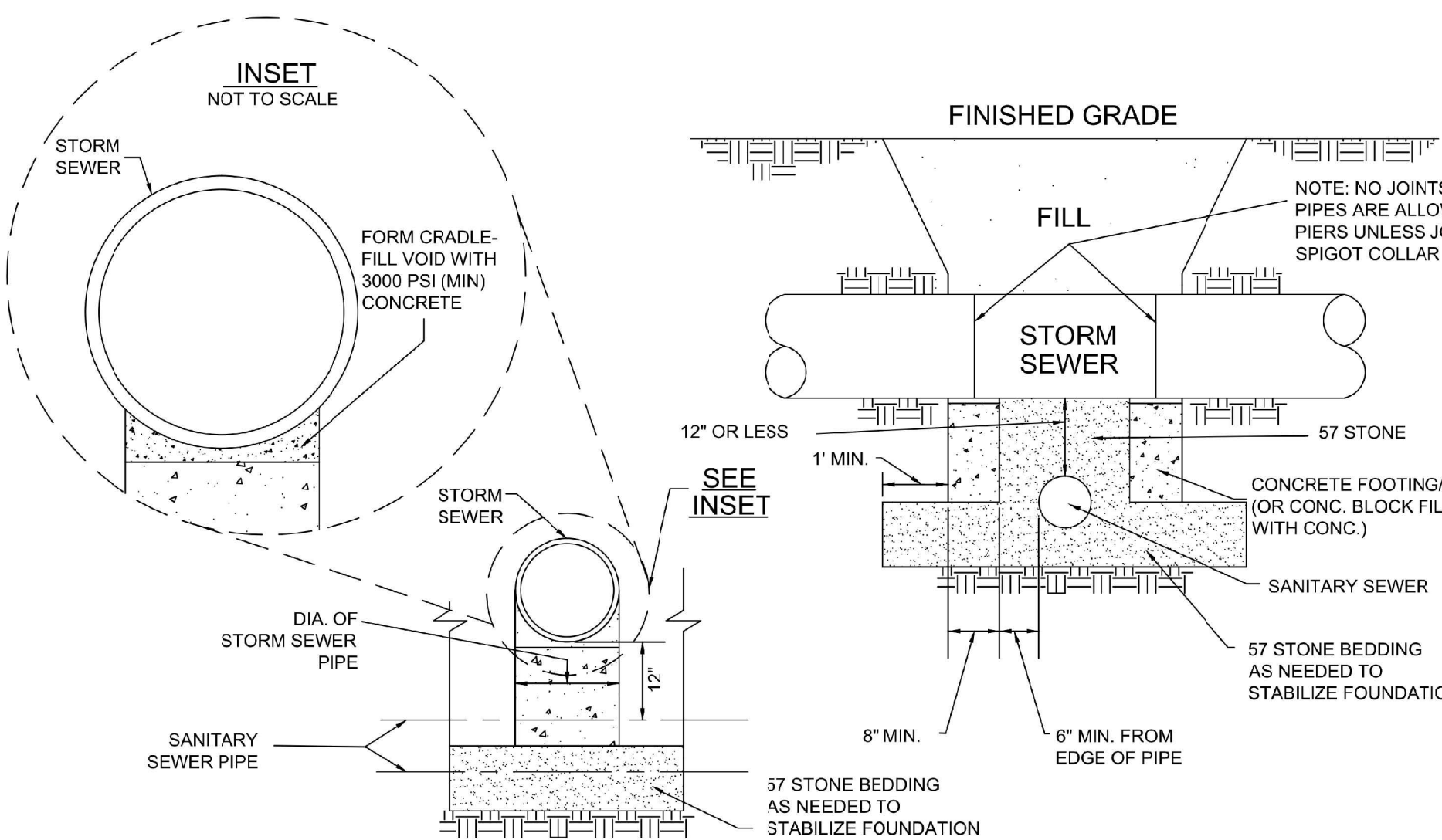
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NOTE: USE D.I.P. (CL50 OR BETTER)

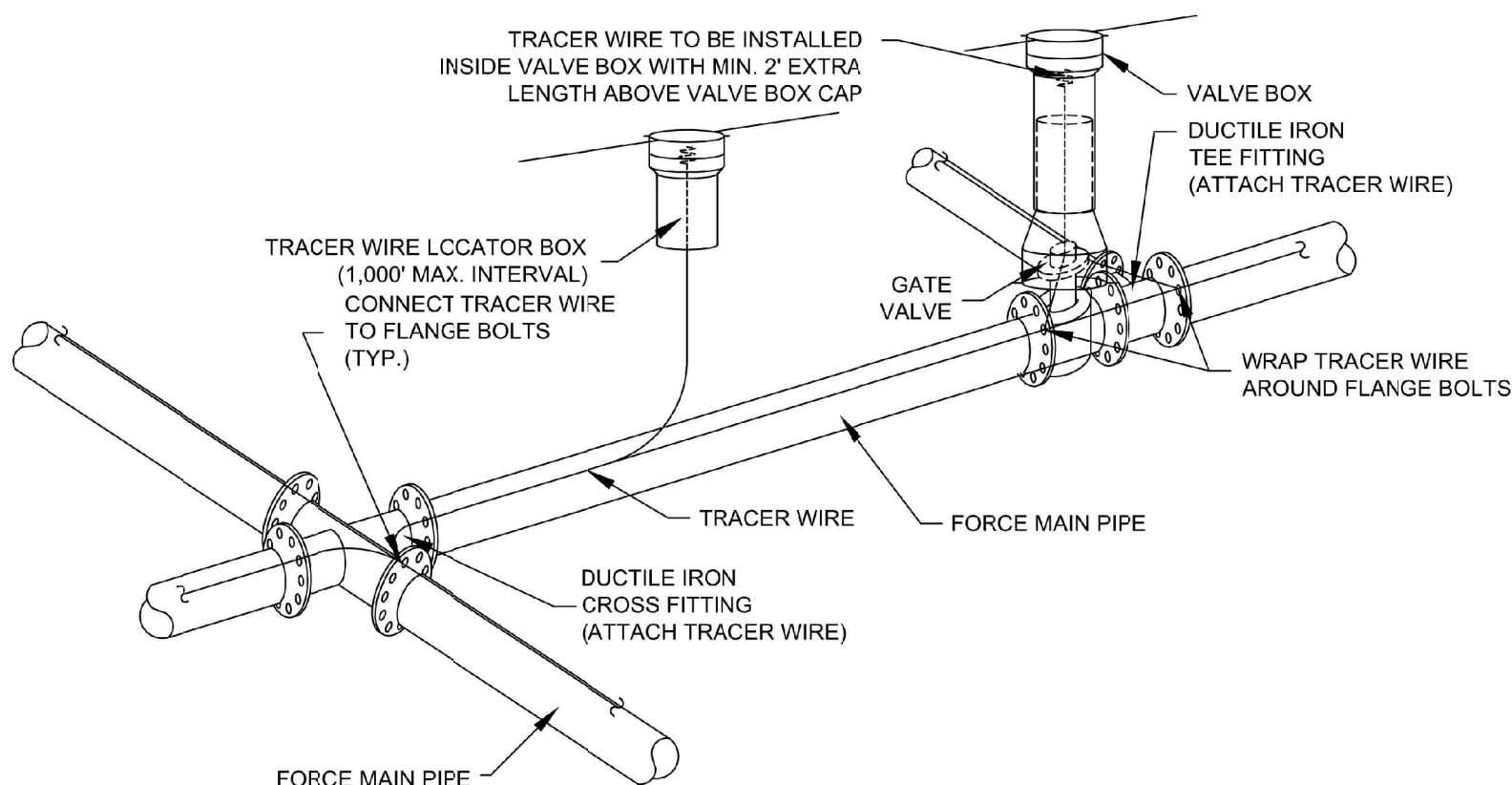
FORCE MAIN DITCH & STORM DRAIN CROSSING

NOT TO SCALE



STRUCTURAL BRIDGING DETAIL FOR STORMWATER OVER GRAVITY SEWER INSTALLATIONS WITH LESS THAN 12" SEPARATION

NOT TO SCALE



- NOTES:
1. TRACER WIRE SHALL BE #10 COPPER SOLID CORE COPPER WIRE WITH GAS AND OIL RESISTANT INSULATION
 2. WIRE SHALL BE STRAPPED TO ALL PVC FORCE MAIN PIPING WITH DUCT TAPE AT 12-FT INTERVALS
 3. SECURE WIRE TO ALL TEE AND CROSS FITTINGS
 4. ALL WIRE SPLICES SHALL HAVE WATER PROOF WIRE CONNECTIONS.

TRACER WIRE DETAIL

NOT TO SCALE

GENERAL NOTES:

1. NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
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3. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
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THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

SANITARY SEWER STANDARD DETAILS

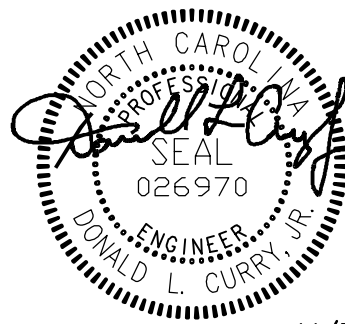
SANITARY SEWER STANDARD DETAILS SS-3



CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

DATE: 1/9/12
SCALE: N/A
DRAWN BY: CFPUA
CHECKED BY: CFPUA
PROJECT NO.:

SHEET NO: 3/4

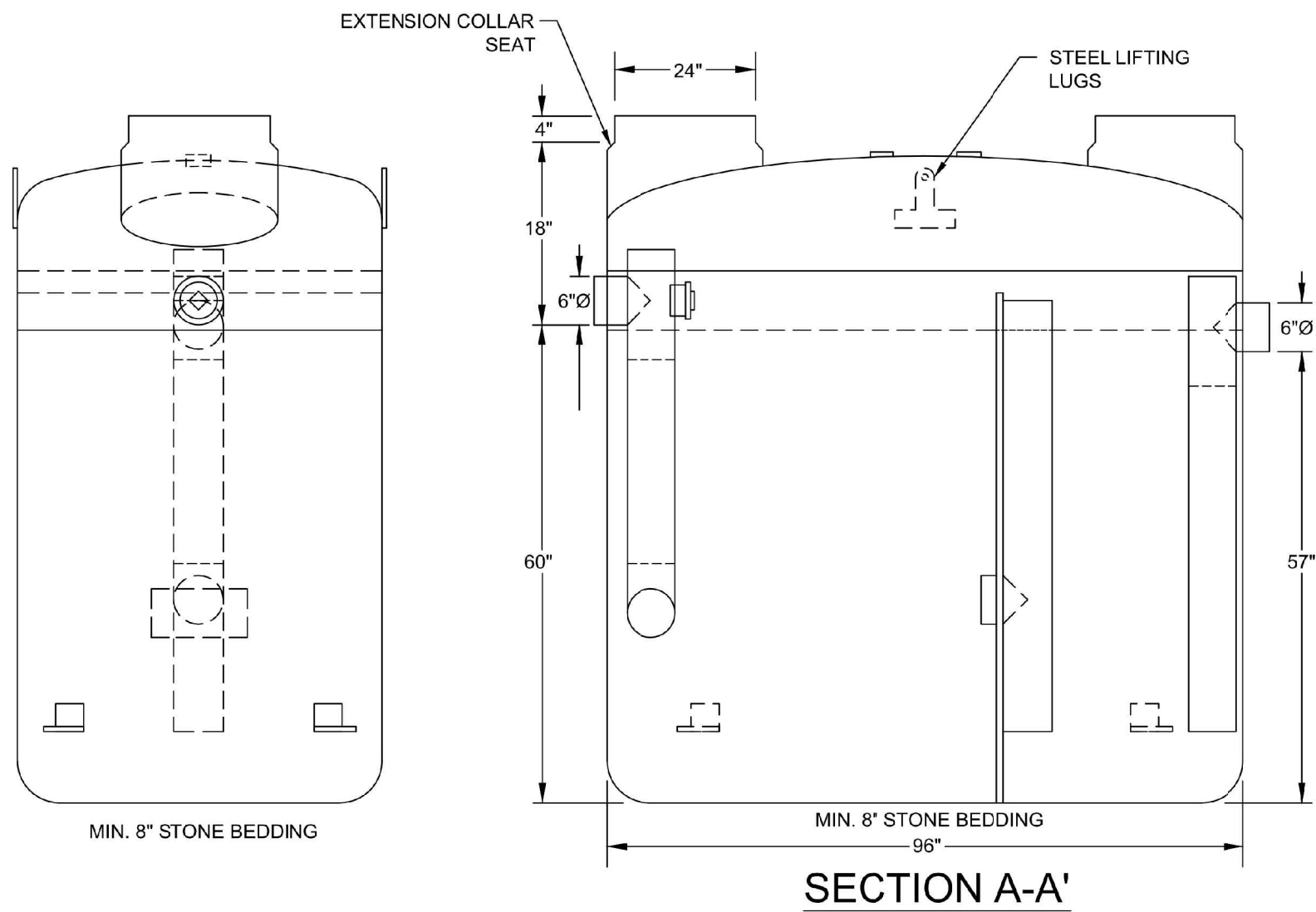
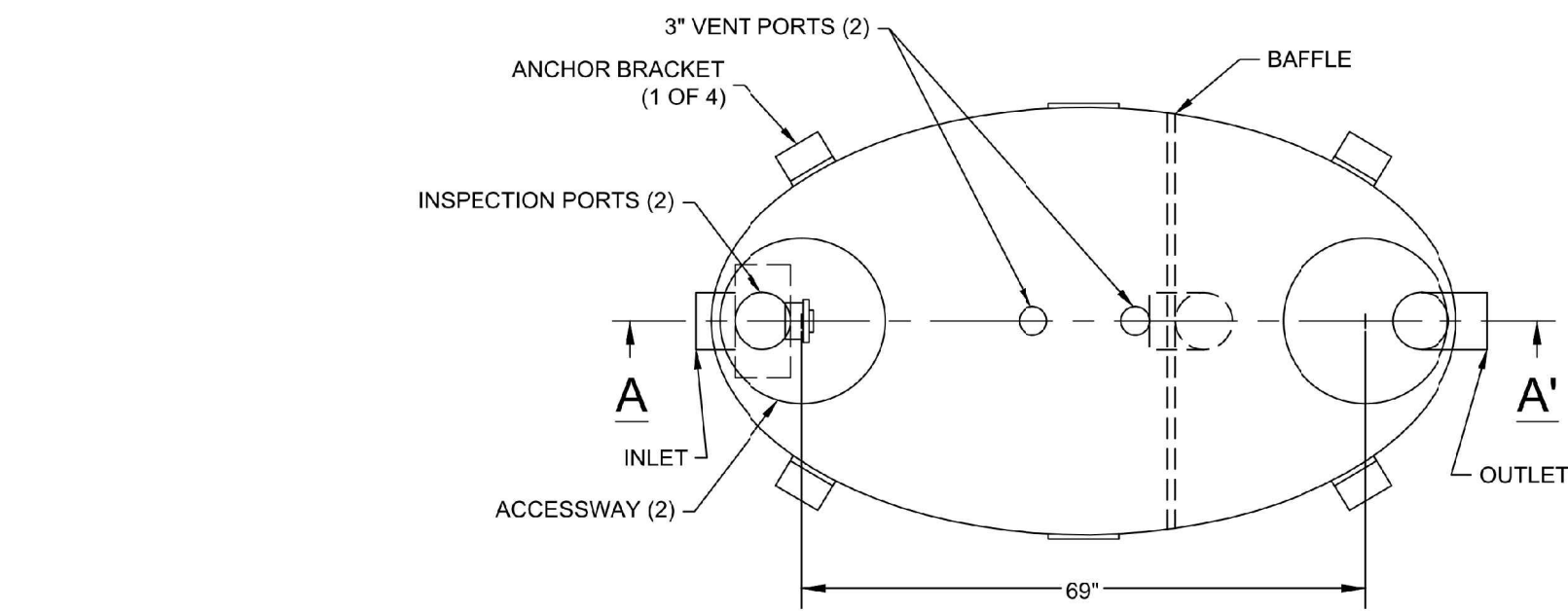


11/30/12

REV:	DESCRIPTION:	DATE:
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1	COW 2ND REVIEW COMMENTS	11/30/12

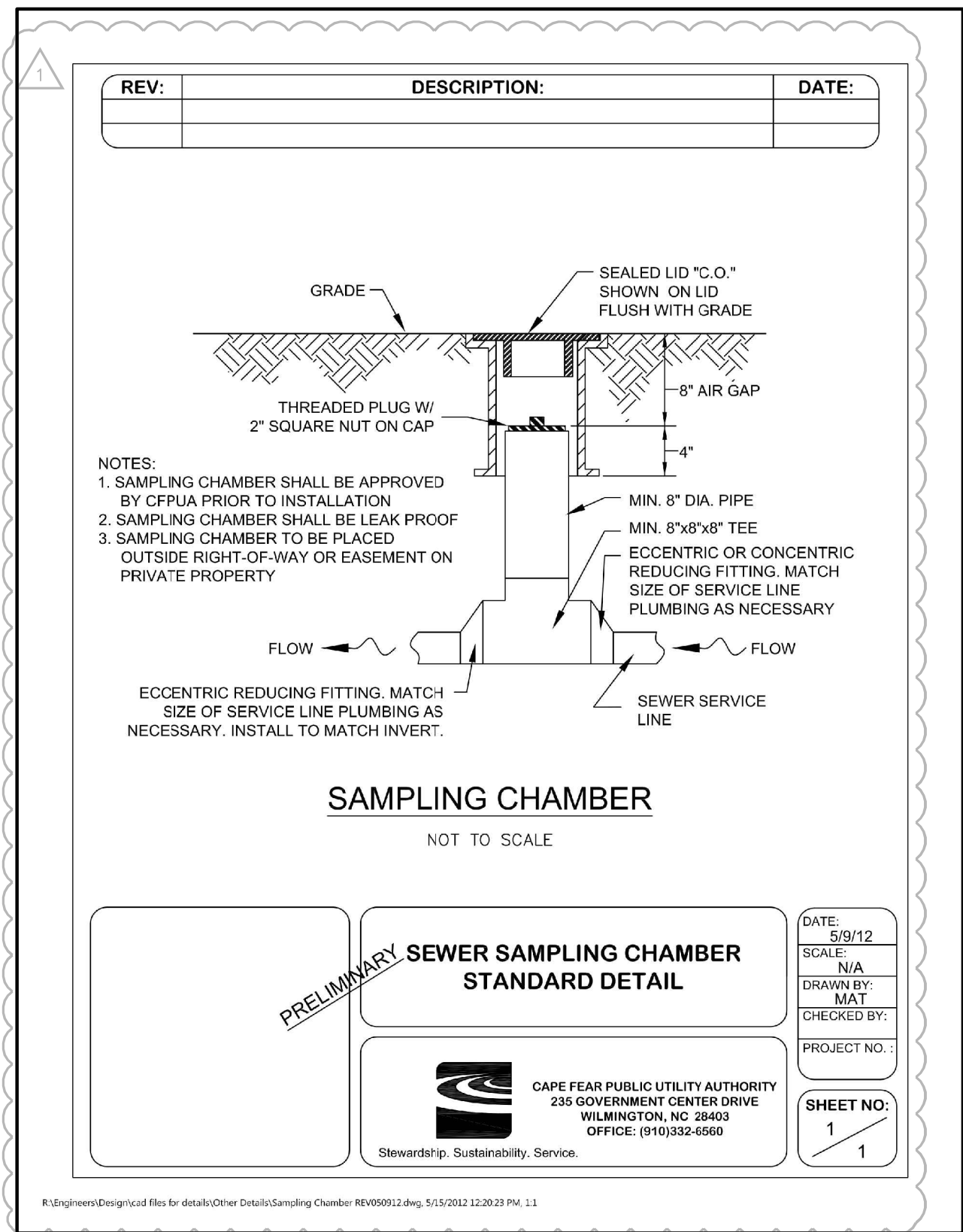
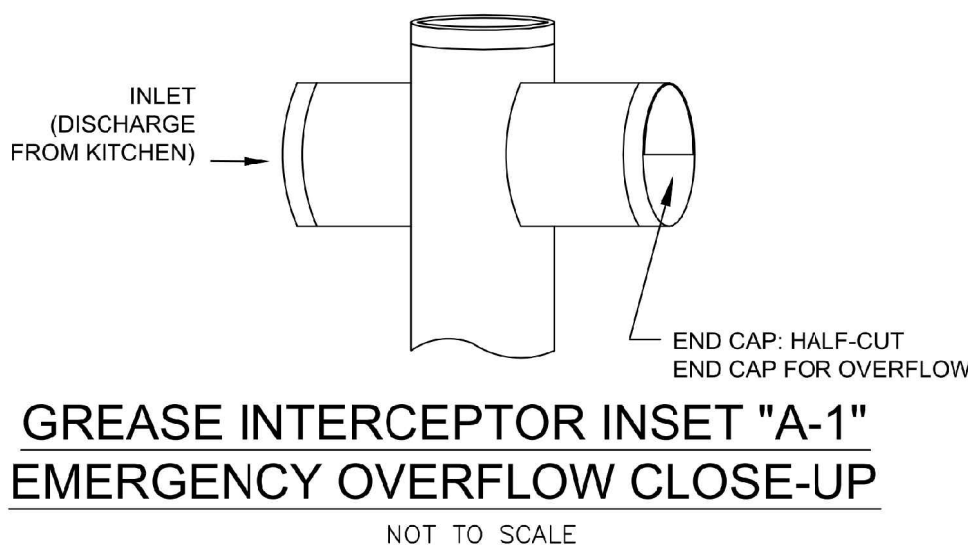
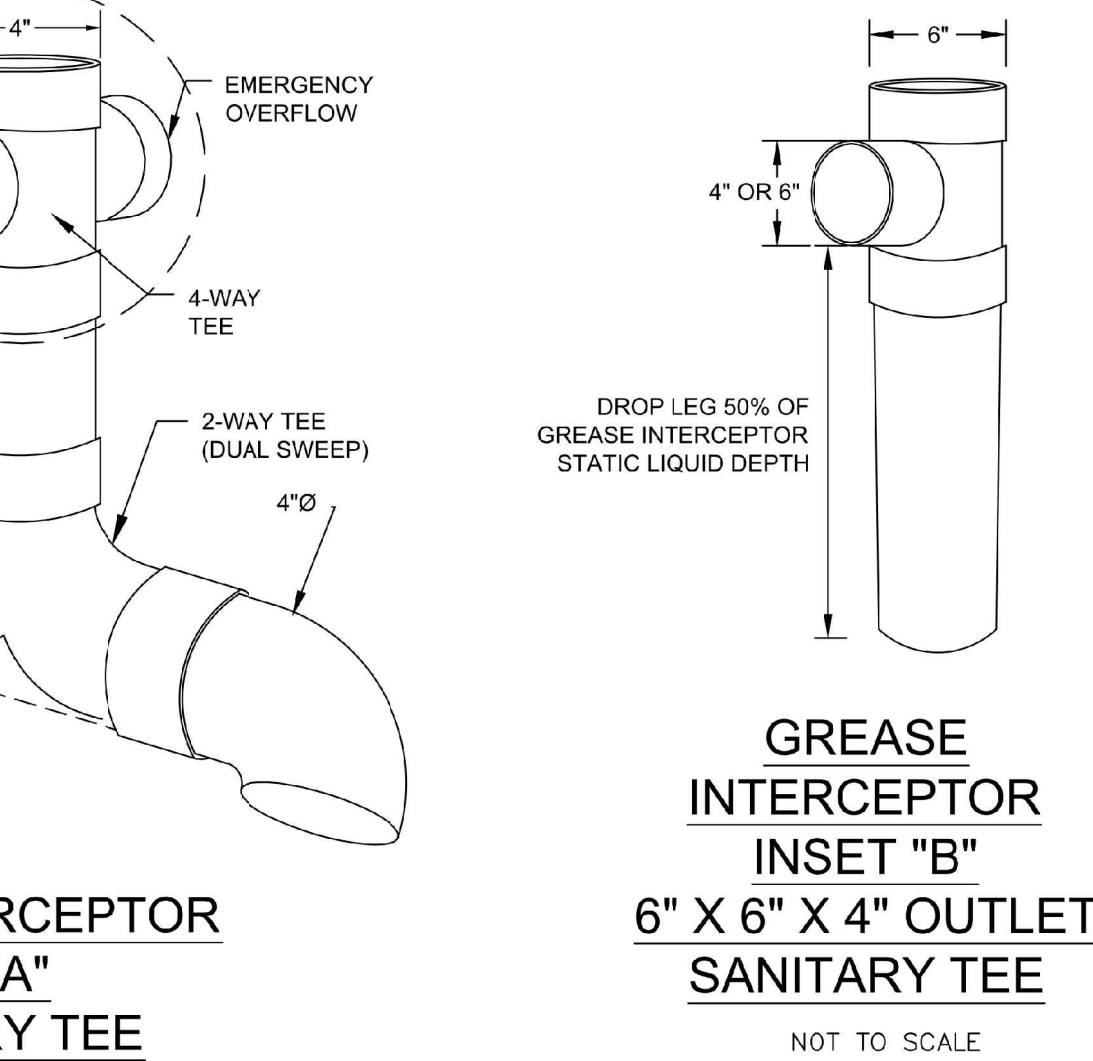
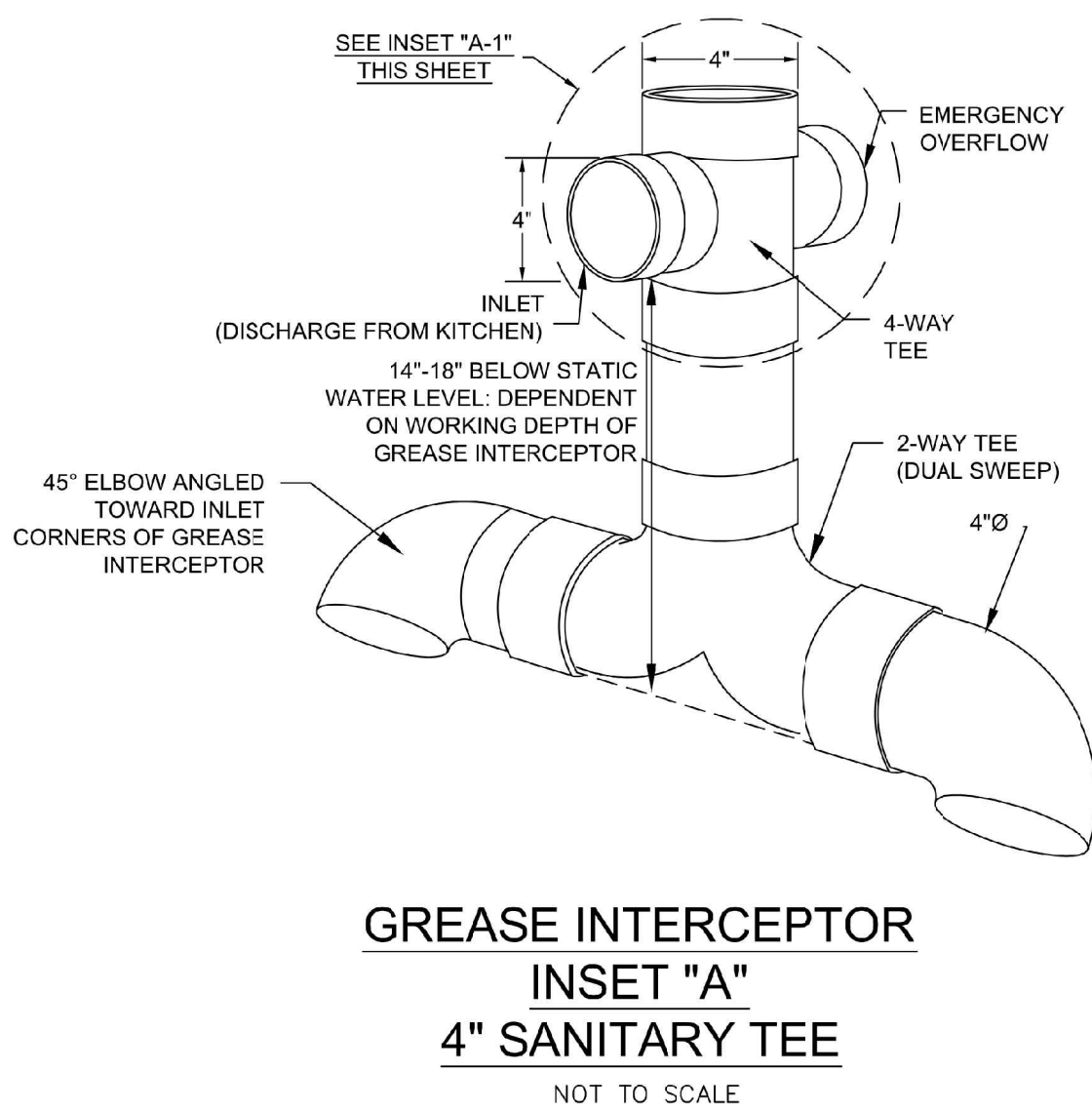
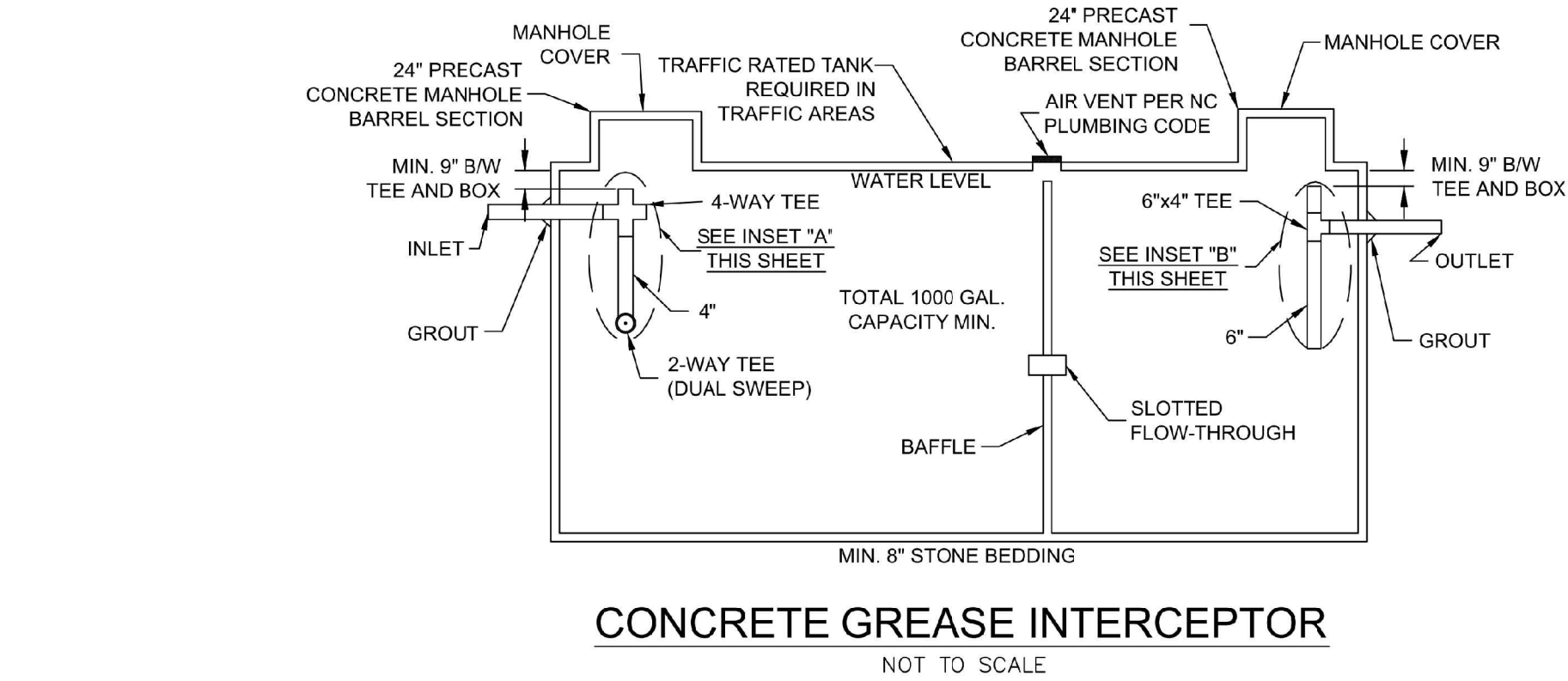
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S:\Engineering\Design\cd files for details\Standard Details\CFPUA Standard Details\CFPUA Sewer Details.dwg, 1/9/2012 5:00:21 PM, 1:1



- NOTES:
1. FOR GRAVITY APPLICATIONS ONLY
 2. MIN. THICKNESS: 1/4" WALL AND 3/8" TOP AND BOTTOM BOWLS
 3. STANDARD PIPE STUDS ARE SOCKET SDR 35 PVC
 4. EXTENSION COLLARS SHALL BE CAULKED WITH SIKAFLEX OR EQUIVALENT FOR WATERTIGHT SEAL
 5. FOLLOW MANUFACTURE'S SPECS FOR TRAFFIC OR PEDESTRIAN LOADING

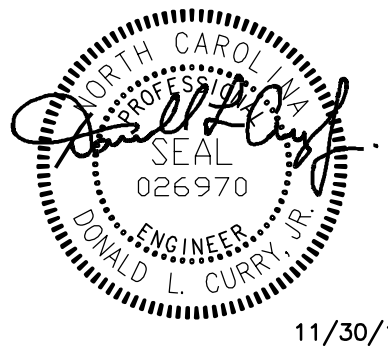
FIBERGLASS GREASE INTERCEPTOR
NOT TO SCALE



- GENERAL NOTES:**
1. NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
 2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
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THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

REV:	DESCRIPTION:	DATE:
1	RESPONSE TO CFPUA COMMENTS DATED 10/03/12	10/18/12
2	COW 2ND REVIEW COMMENTS	11/30/12



11/30/12

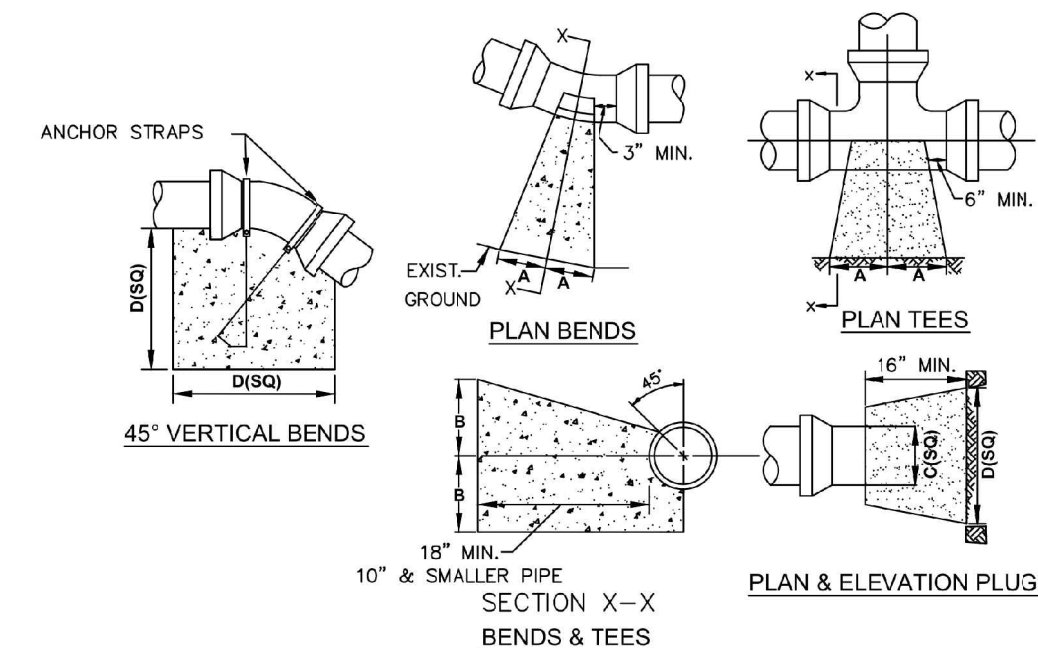
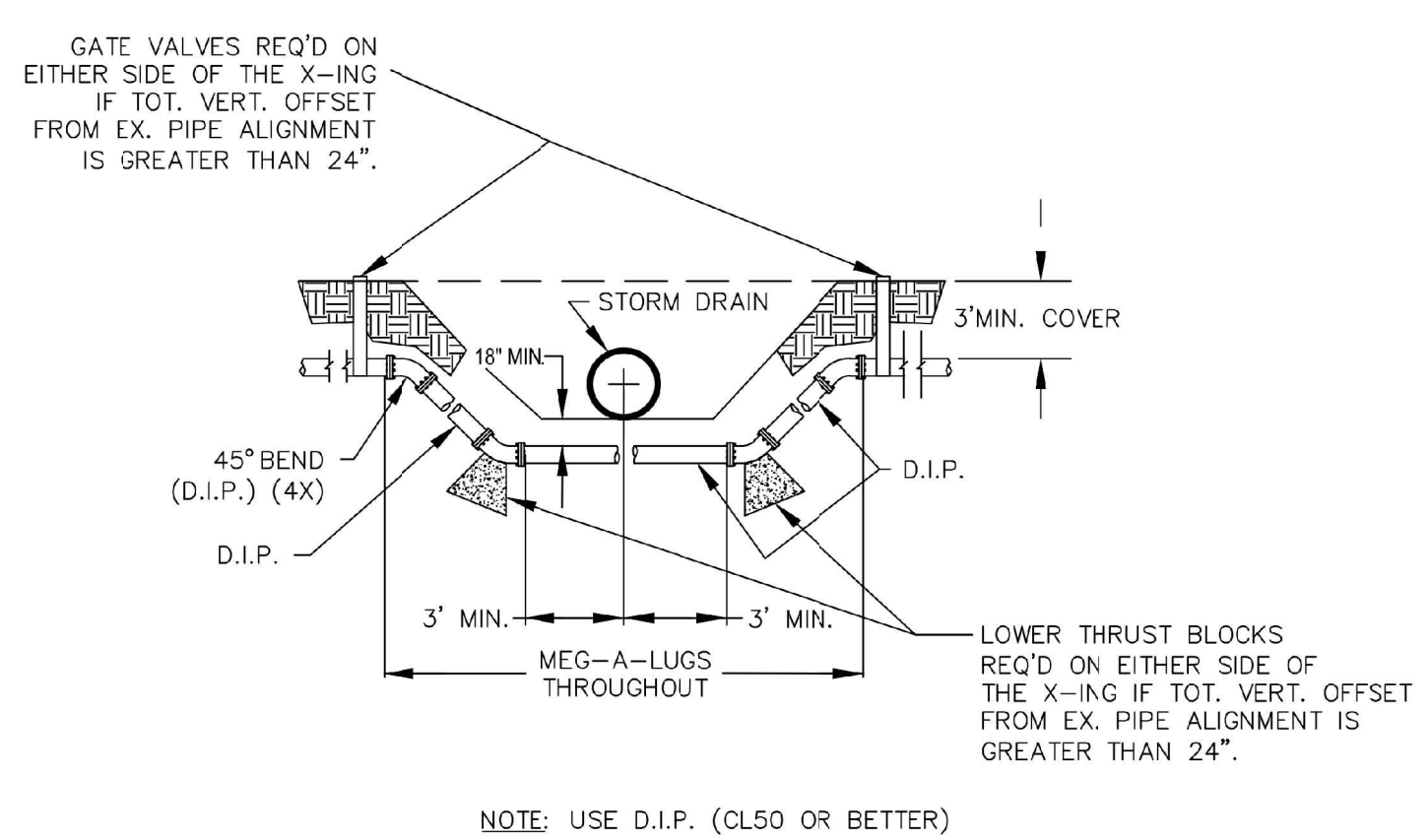
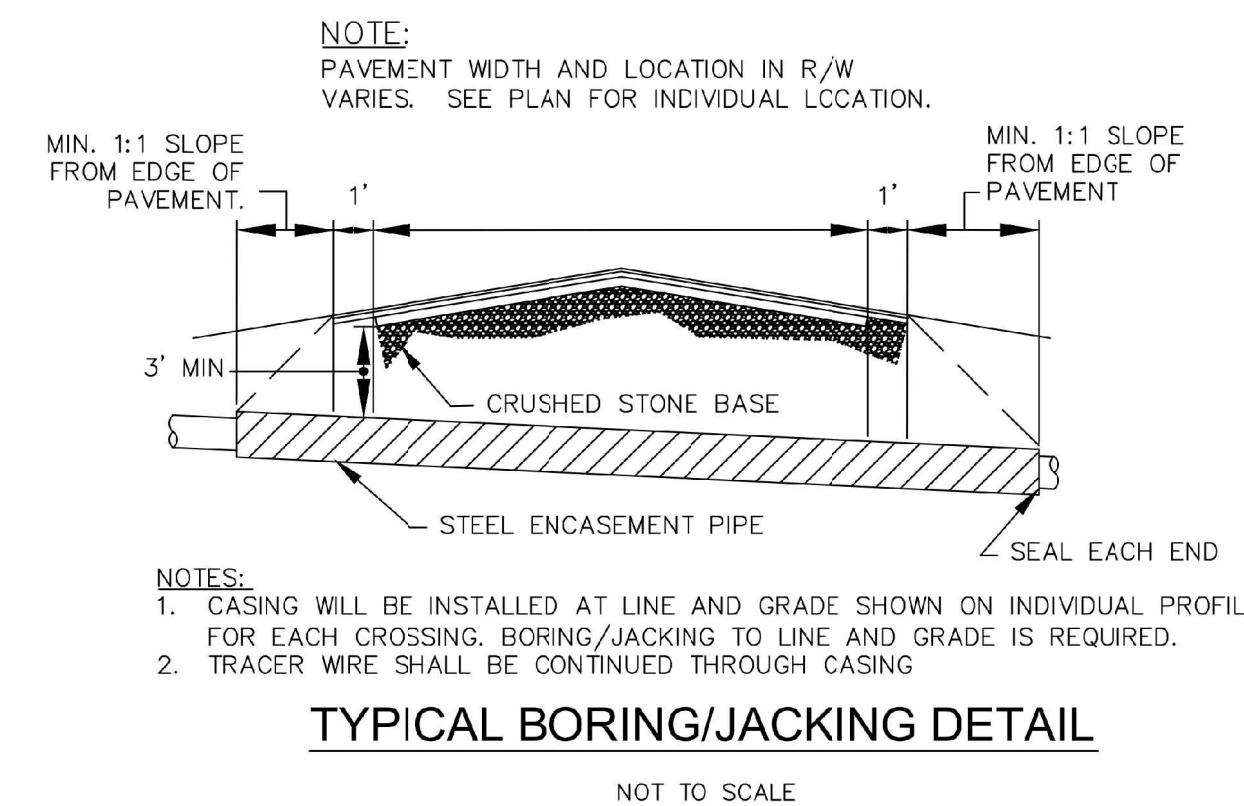
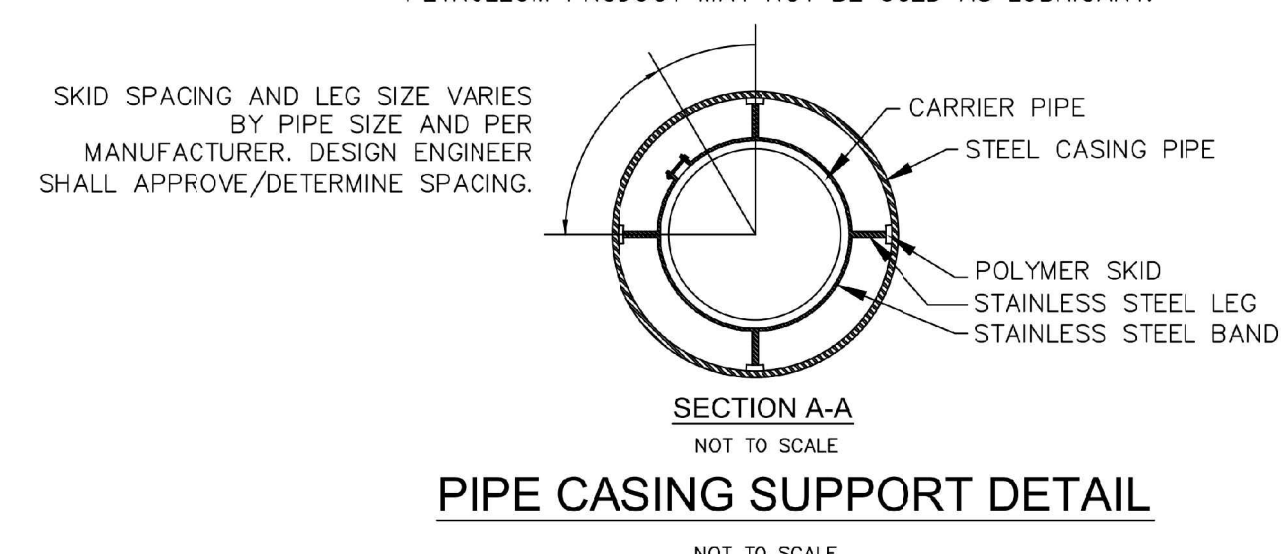
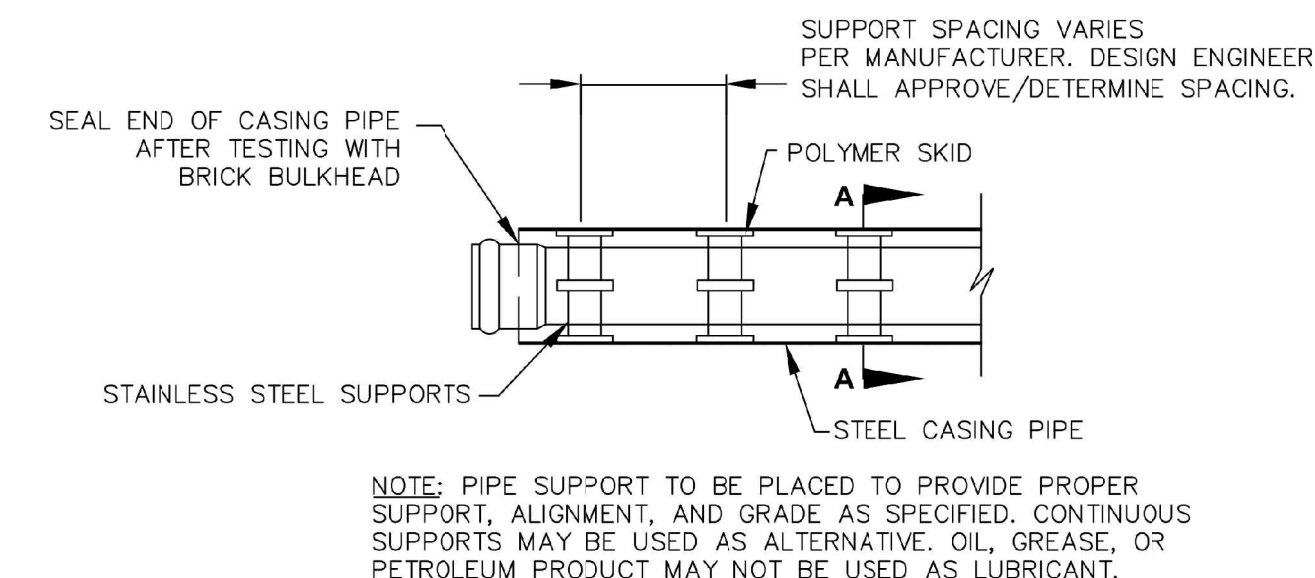
SANITARY SEWER STANDARD DETAILS

SANITARY SEWER STANDARD DETAILS SS-4

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560
Stewardship. Sustainability. Service.

DATE: 1/9/12
SCALE: N/A
DRAWN BY: CFPUA
CHECKED BY: CFPUA
PROJECT NO.:

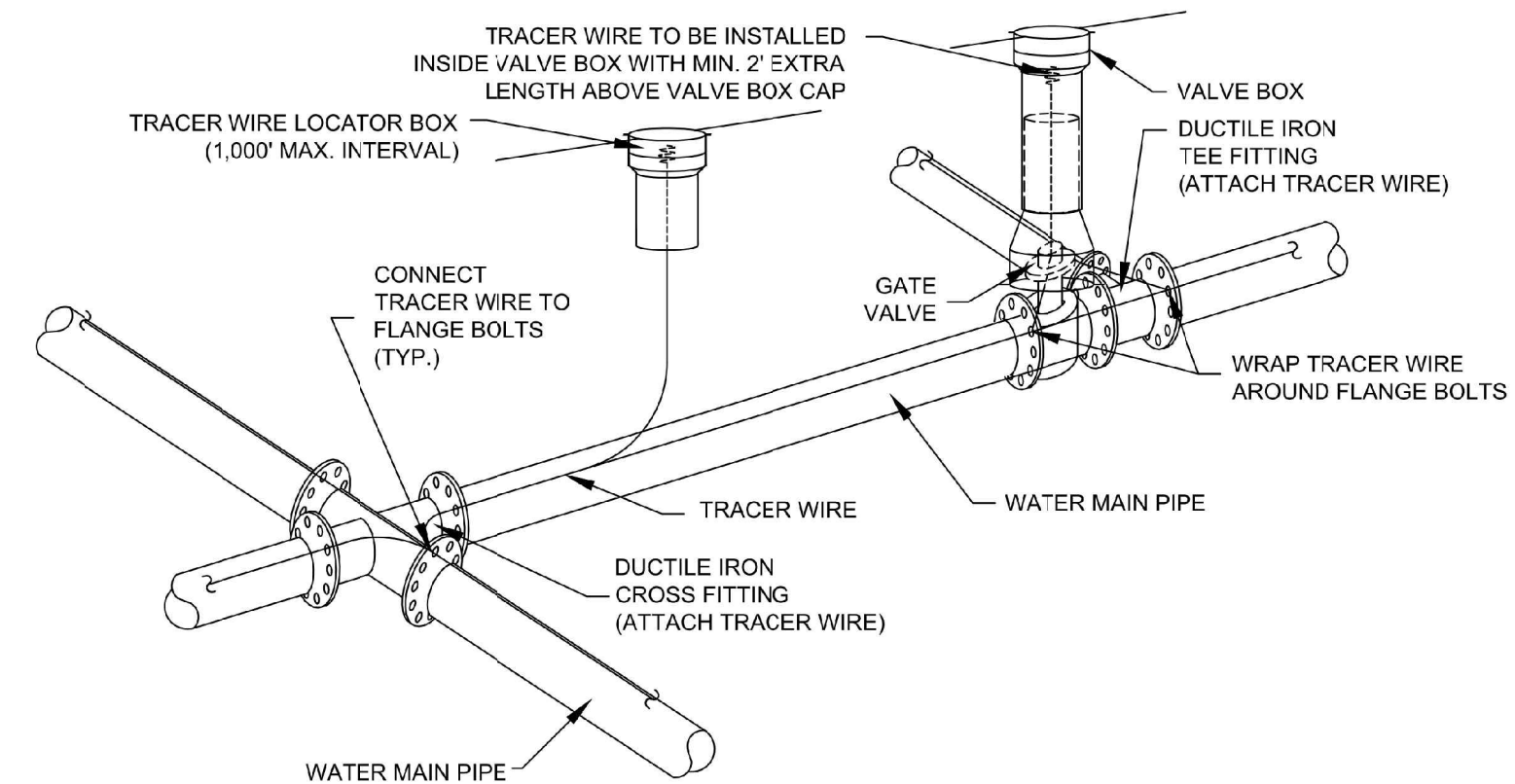
SHEET NO: 4 / 4



SIZE	90° BENDS		45° BENDS		22 1/2° BENDS		TEES/PLUGS		45° VERT. BENDS
	A	B	A	B	A	B	A	B	
3"	8"	6"	5"	6"	3"	7"	6"	3"	27"
4"	8"	9"	5"	8"	3"	11"	6"	3"	28"
6"	14"	11"	9"	9"	8"	8"	12"	3"	36"
8"	16"	16"	12"	12"	10"	13"	14"	13"	42"
10"	18"	22"	15"	14"	14"	16"	18"	15"	50"
12"	20"	26"	16"	17"	16"	16"	22"	18"	62"
14"	26"	29"	21"	19"	18"	18"	26"	20"	72"
16"	33"	29"	25"	21"	20"	21"	32"	21"	83"
18"	40"	30"	28"	24"	22"	23"	36"	24"	88"

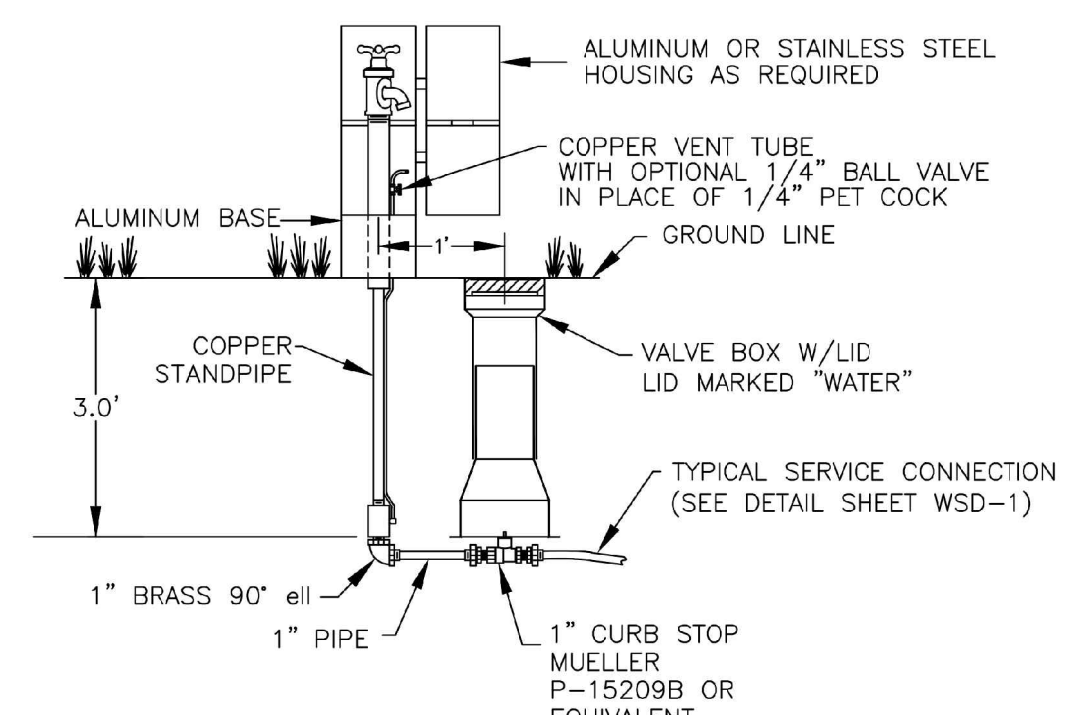
NOTES: 1. BASED ON 160 PSI TEST PRESSURE AND 2000 PSF SOIL BEARING CAPACITY.
2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.
3. USE MEG-A-LUG (PREFERRED) IN LIEU OF BLOCKING AND RODDING.

THRUST BLOCK DETAIL
NOT TO SCALE

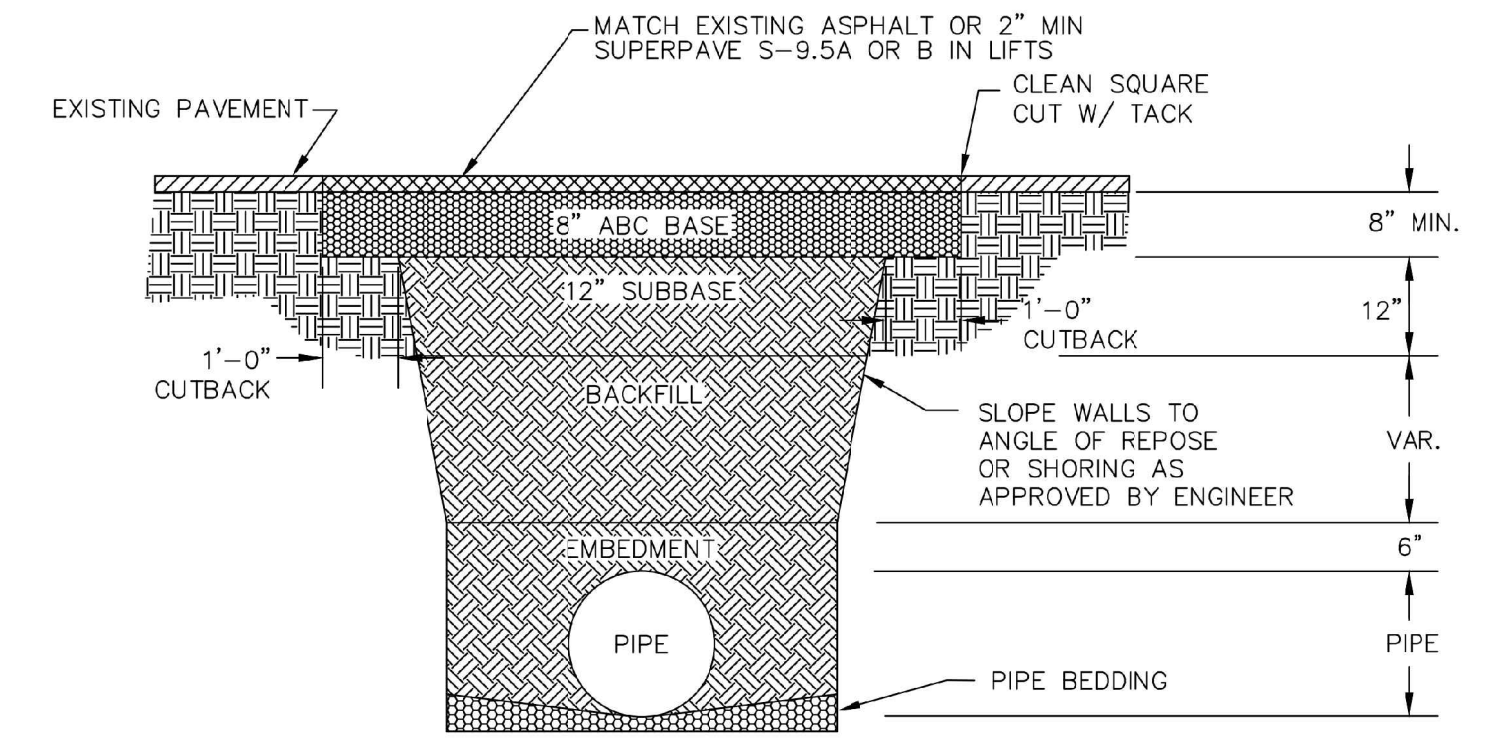


NOTES: 1. TRACER WIRE SHALL BE #10 COPPER SOLID CORE COPPER WIRE WITH GAS AND OIL RESISTANT INSULATION.
2. WIRE SHALL BE STRAPPED TO ALL PVC WATER MAIN PIPING WITH DUCT TAPE AT 12-FT. INTERVALS.
3. SECURE WIRE TO ALL TEE AND CROSS FITTINGS.
4. ALL WIRE SPLICES SHALL HAVE WATER PROOF WIRE CONNECTIONS.

TRACER WIRE DETAIL



SAMPLING STATION
NOT TO SCALE

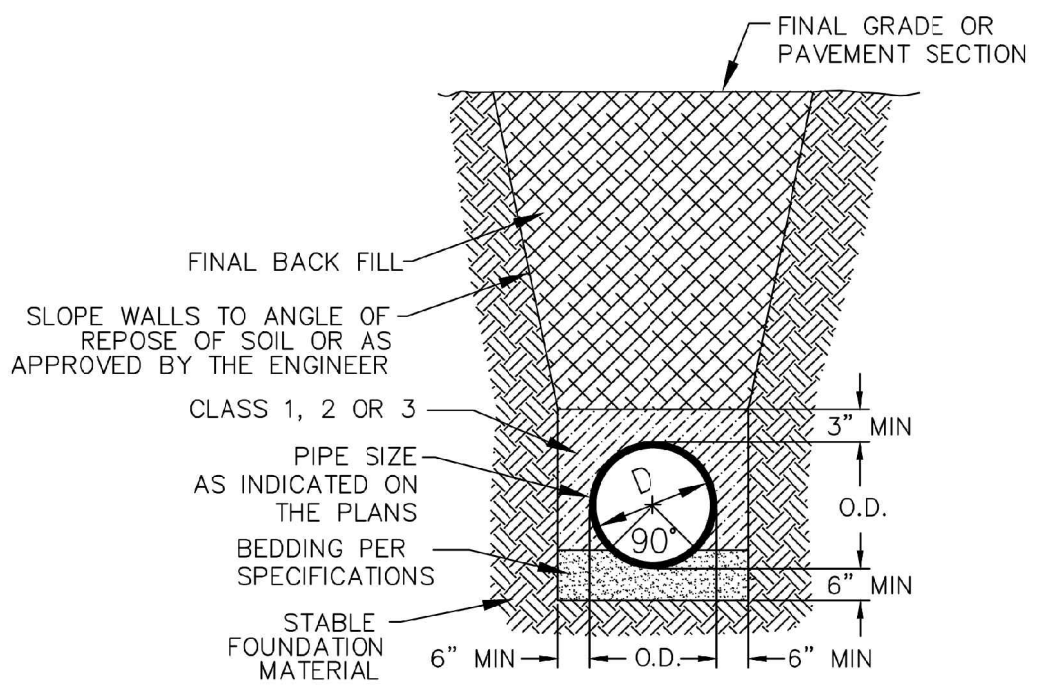


NOTES: 1. BACKFILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBOS, DEBRIS, ORGANICS AND LITTLE TO NO EXCESSIVE MOISTURE.
2. SELECT BACKFILL MAY BE SUBSTITUTED OR REQUIRED BY CITY TO ACHIEVE COMPACTION, (I.E. #57, ABC, CRUSHED LIMESTONE, CLEAN SAND, FLOWABLE FILL, ETC).
3. 8-INCH OF ABC BASE MATERIAL SHALL BE USED ON CITY STREETS.
4. BACKFILL AND BASE MATERIALS SHALL BE COMPACTED 12" MINIMUM LIFTS.
5. SOIL SHALL BE COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK), HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
6. ALL APPROVED CASTINGS SHALL BE SET FLUSH TO GRADE AND SUPPORTED IF APPLICABLE.
7. ABC BASE AND SUBBASE COMPACTED TO 98% AND BACKFILL AND EMBEDMENT COMPACTED TO 90% AS DETERMINED BY THE MODIFIED PROCTOR AASHTO METHOD T-99.
8. 1'-0" CUTBACKS OF ASPHALT SHALL BE PREPARED ON UNDISTURBED SOIL. MINIMUM ASPHALT DENSITY IS 90%.

PAVEMENT REPAIR WHERE PIPE INSTALLED

(FOR PRIVATE ROADS AND PAVED AREAS;
CONTRACTOR TO MEET MIN. REQUIREMENTS AS DEFINED BY
RIGHT-OF-WAY OWNER FOR PUBLIC ROAD REPAIRS)

NOT TO SCALE

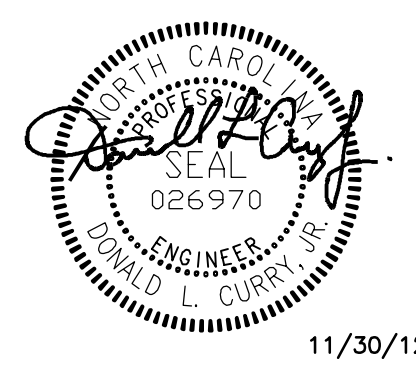


CL 50 DUCTILE IRON
DR 18 PVC PIPE TRENCH DETAIL
NOT TO SCALE

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THE DETAILS SHOWN HEREON SUPERCEDE CFPUA
WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04



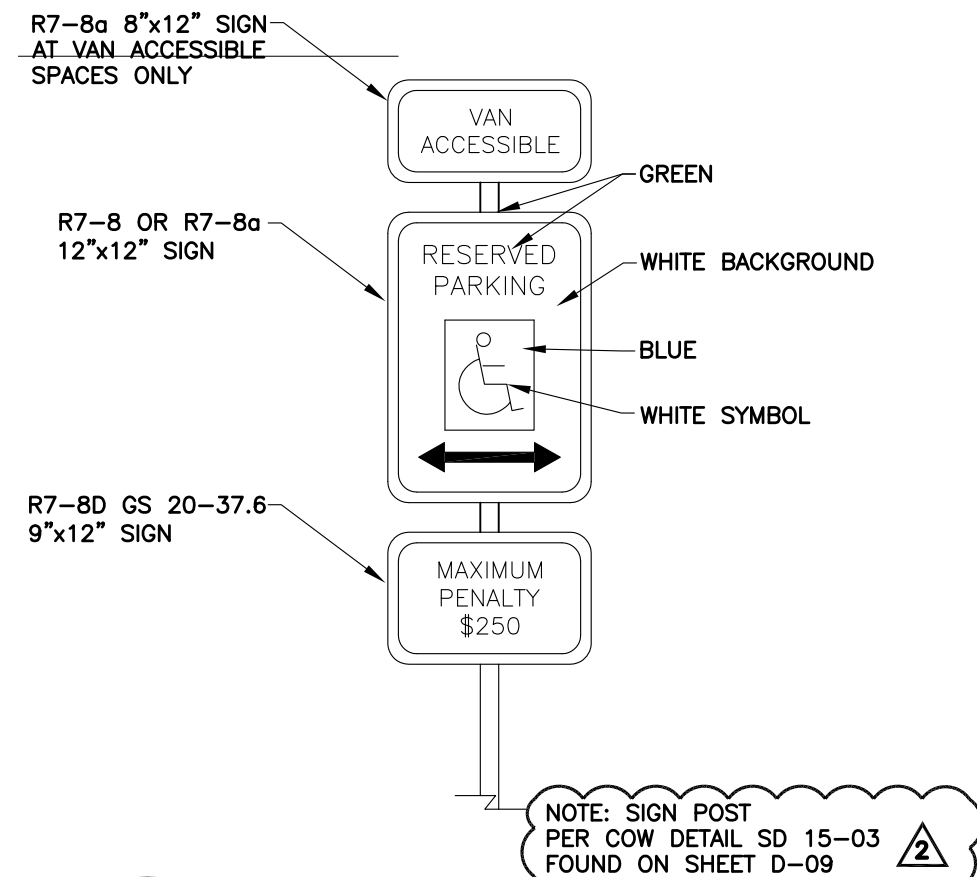
REV:	DESCRIPTION:	DATE:
1	RESPONSE TO CFPUA COMMENTS DATED 10/03/12	10/18/12
2	COW 2ND REVIEW COMMENTS	11/30/12

WATER DISTRIBUTION SYSTEM
STANDARD DETAILS

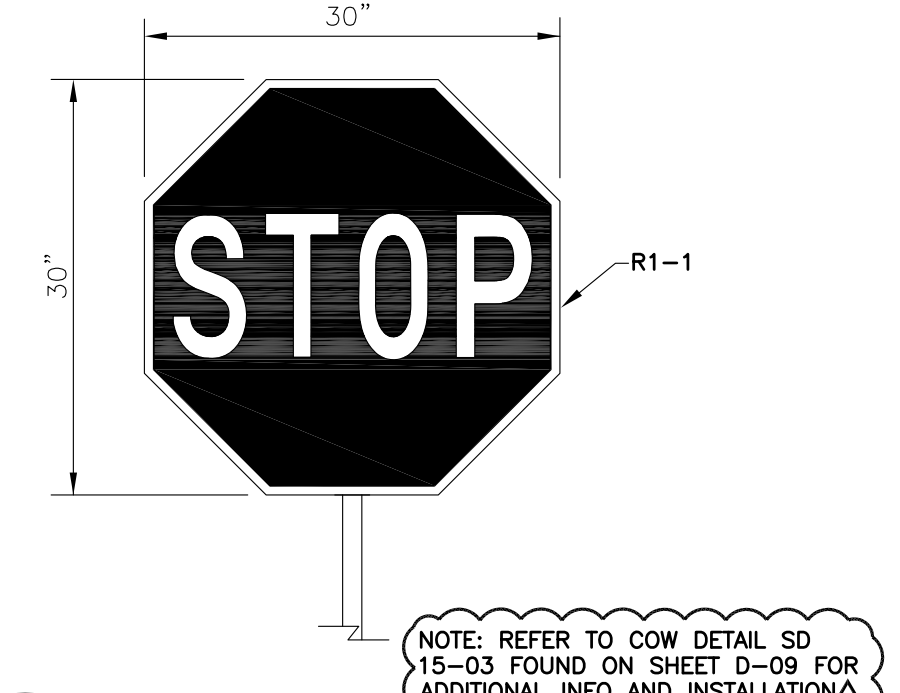
WATER STANDARD DETAILS
WSD-2

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

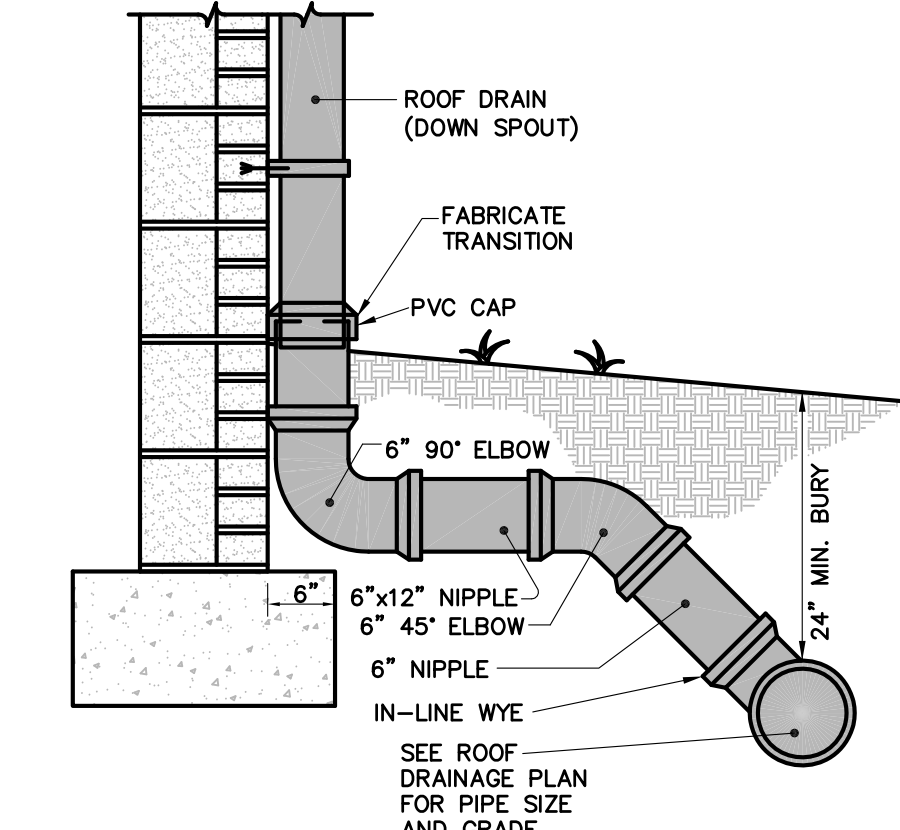
DATE:	1/9/12
SCALE:	N/A
DRAWN BY:	CFPUA
CHECKED BY:	CFPUA
PROJECT NO.:	
SHEET NO:	2
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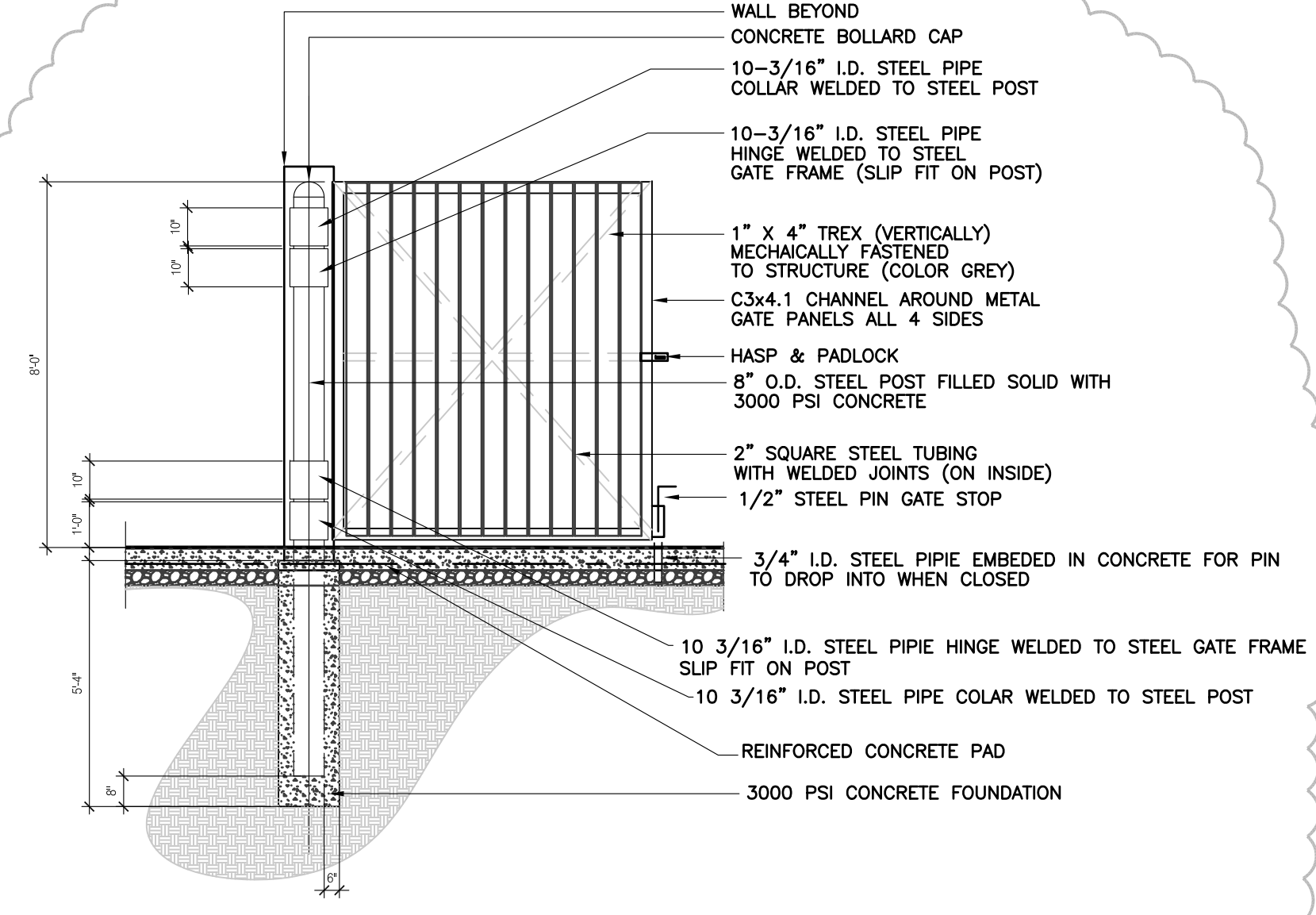
1 ACCESSIBLE PARKING SIGNAGE
D-08 SCALE: N.T.S.



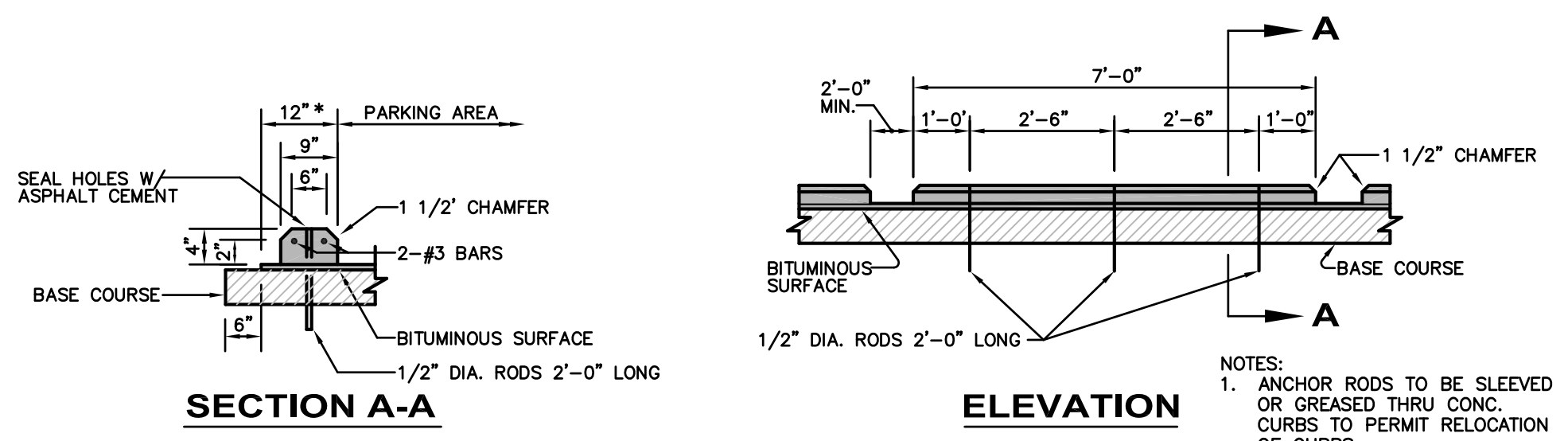
2 STOP SIGN
D-08 SCALE: N.T.S.



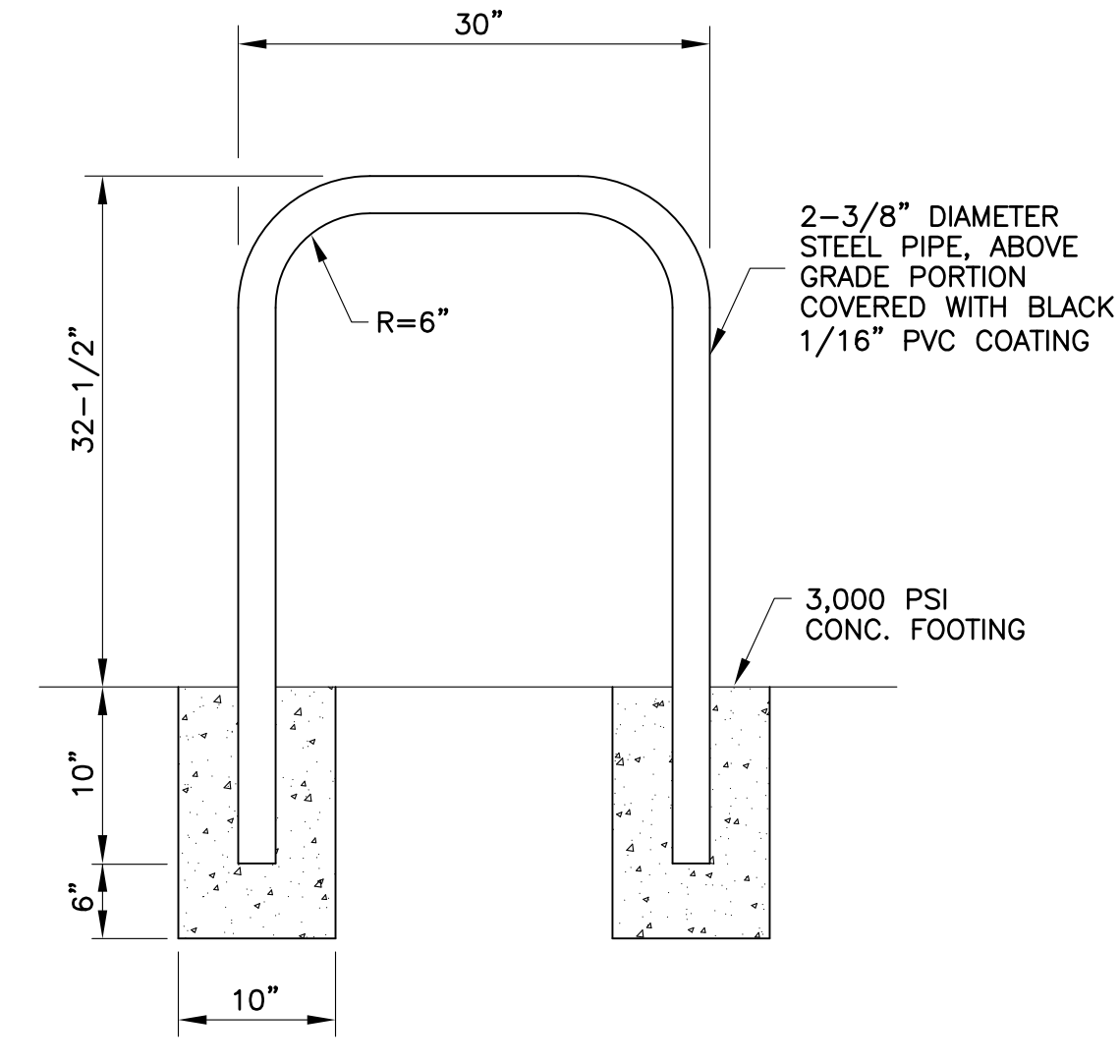
3 ROOF DRAIN TIE-IN
D-08 SCALE: N.T.S.



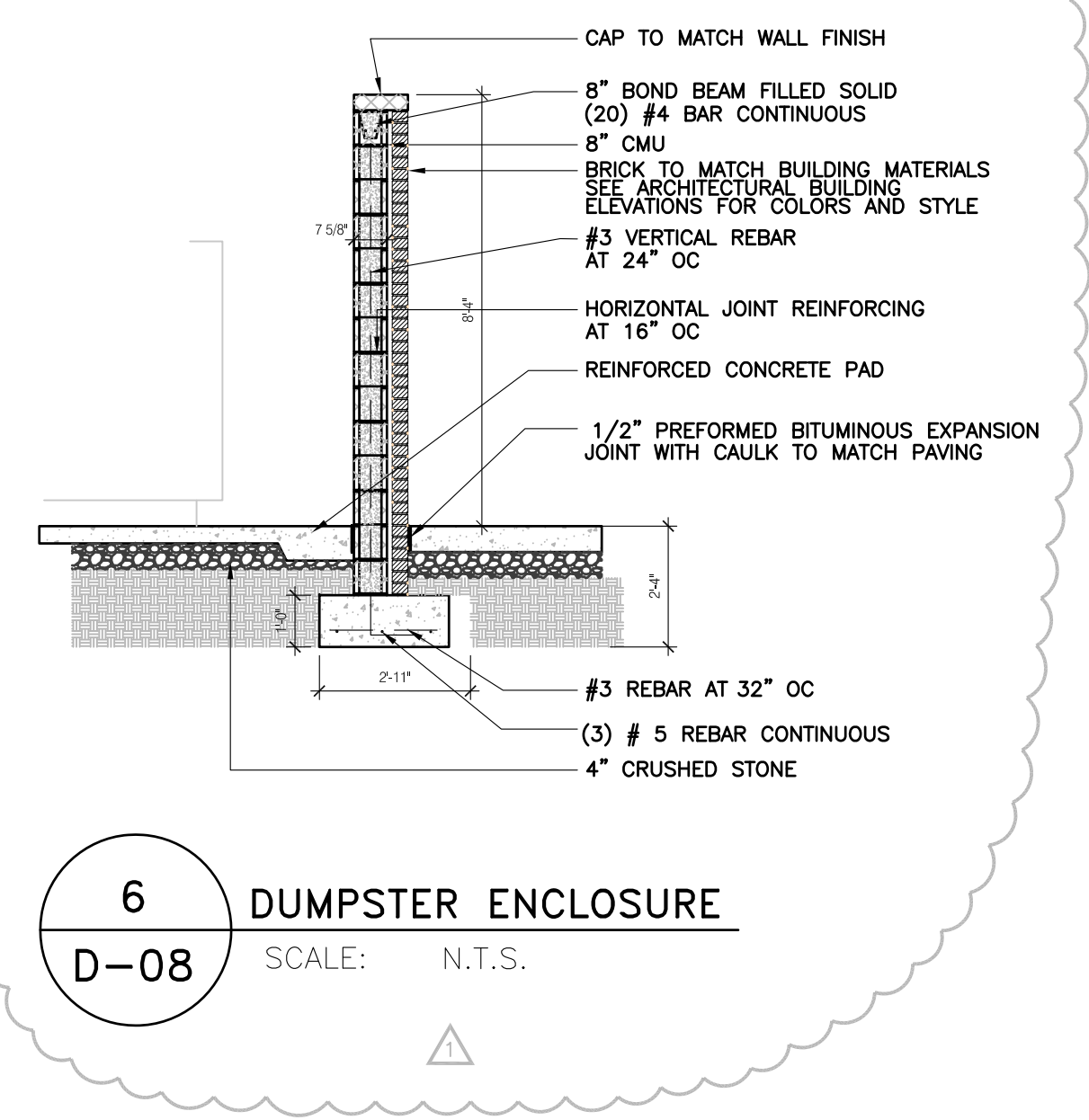
4 DUMPSTER ENCLOSURE GATE
D-08 SCALE: N.T.S.



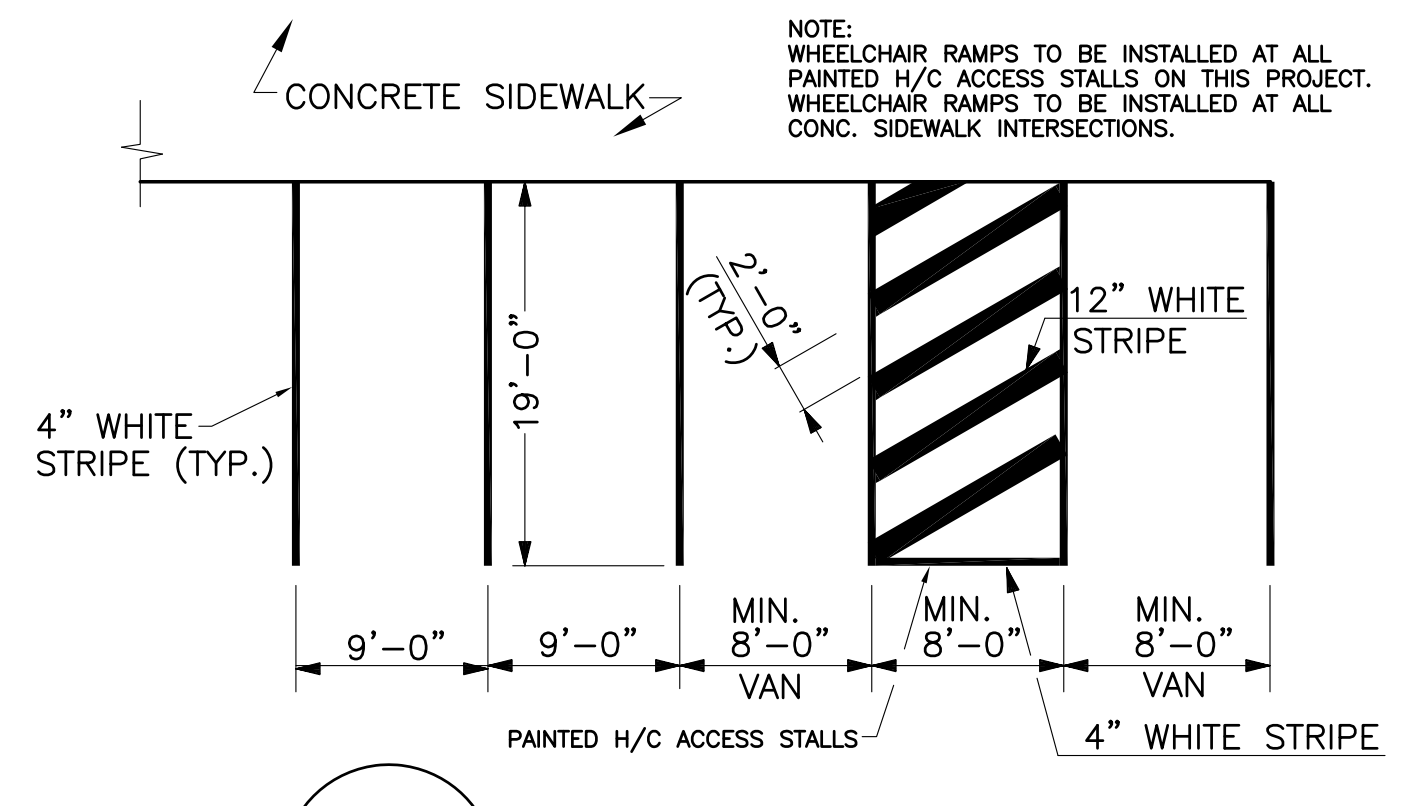
5 WHEEL STOP DETAIL
D-08 SCALE: N.T.S.



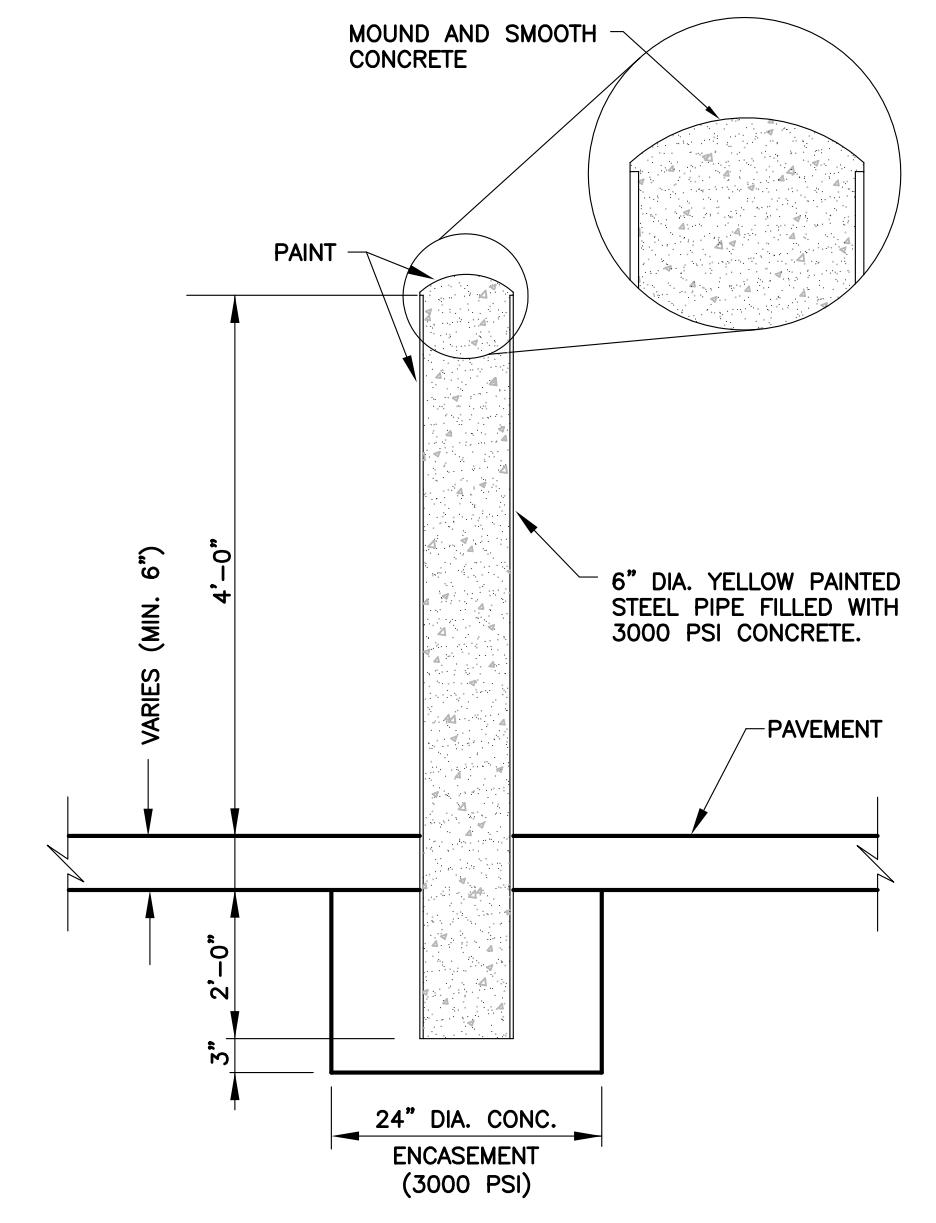
9 BIKE RACK DETAIL
D-08 SCALE: N.T.S.



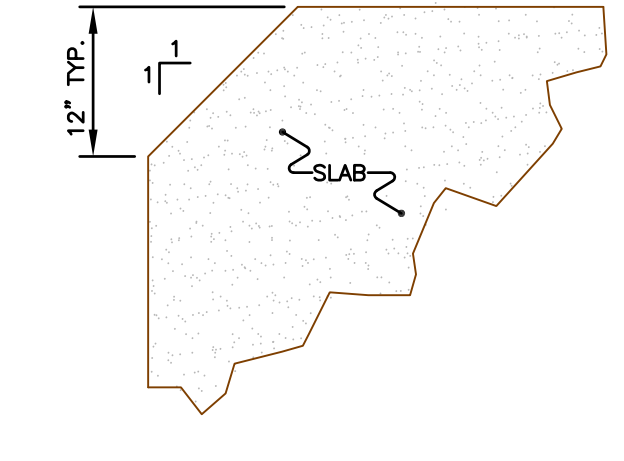
6 DUMPSTER ENCLOSURE
D-08 SCALE: N.T.S.



7 90° HANDICAP STALLS - TYPICAL
D-08 SCALE: N.T.S.



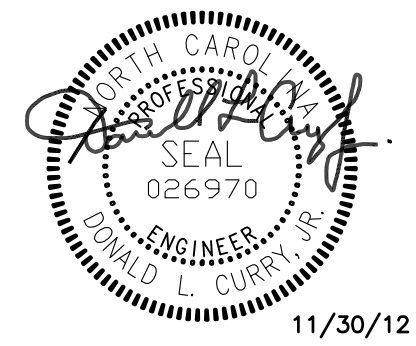
8 BOLLARD
D-08 SCALE: N.T.S.

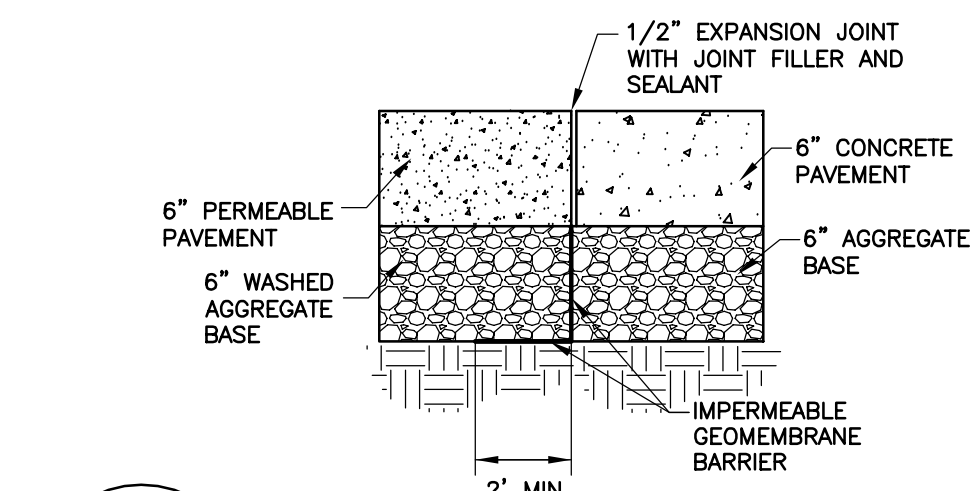
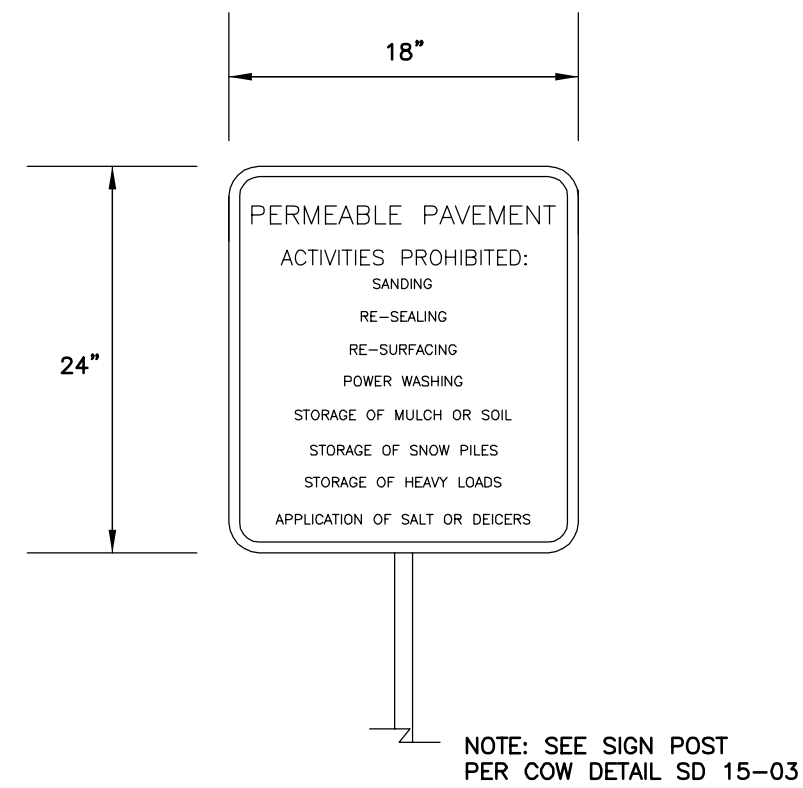


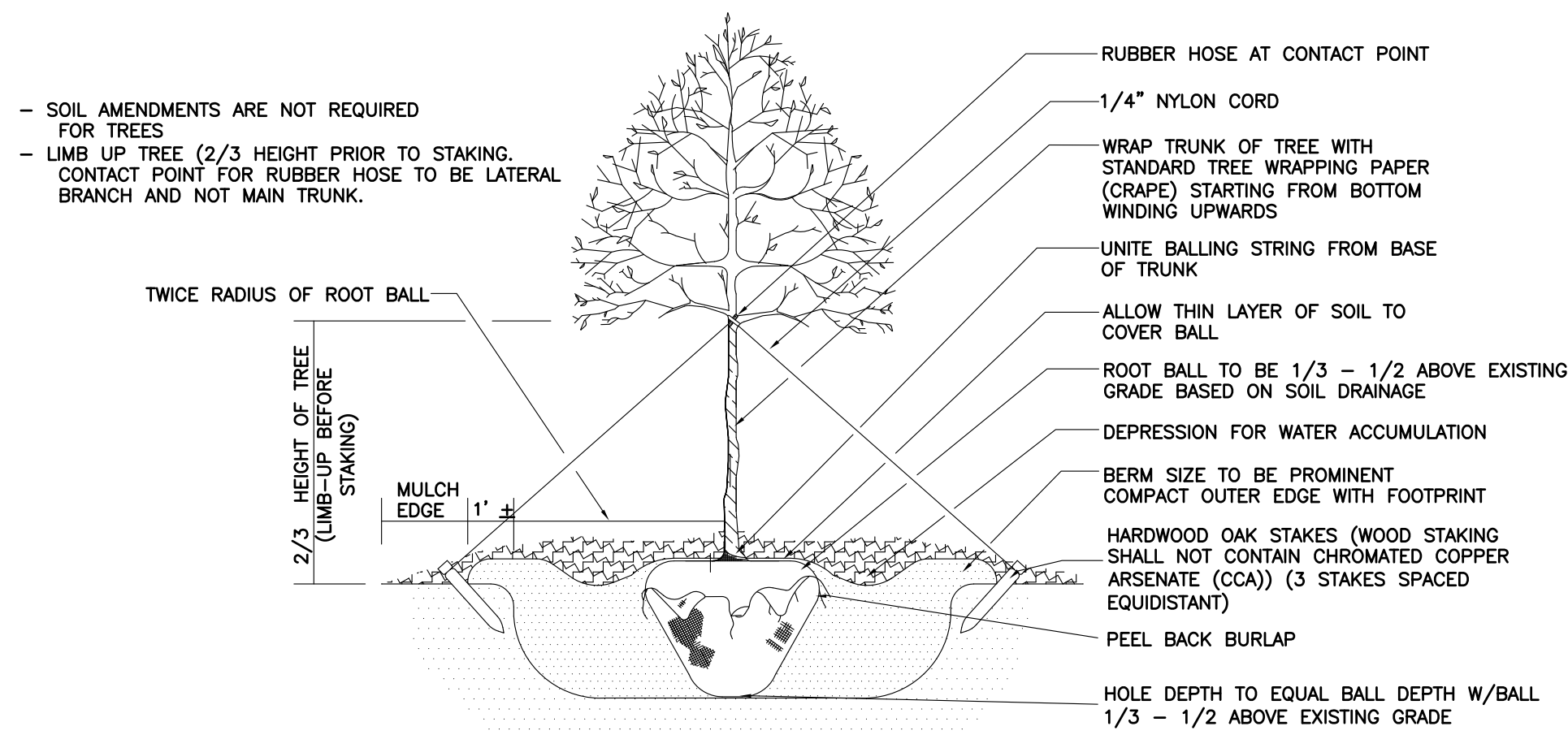
10 CONCRETE CORNER DETAIL
D-08 SCALE: N.T.S.

City of WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED DRAINAGE PLAN
Date: _____ Permit # _____
Signed: _____

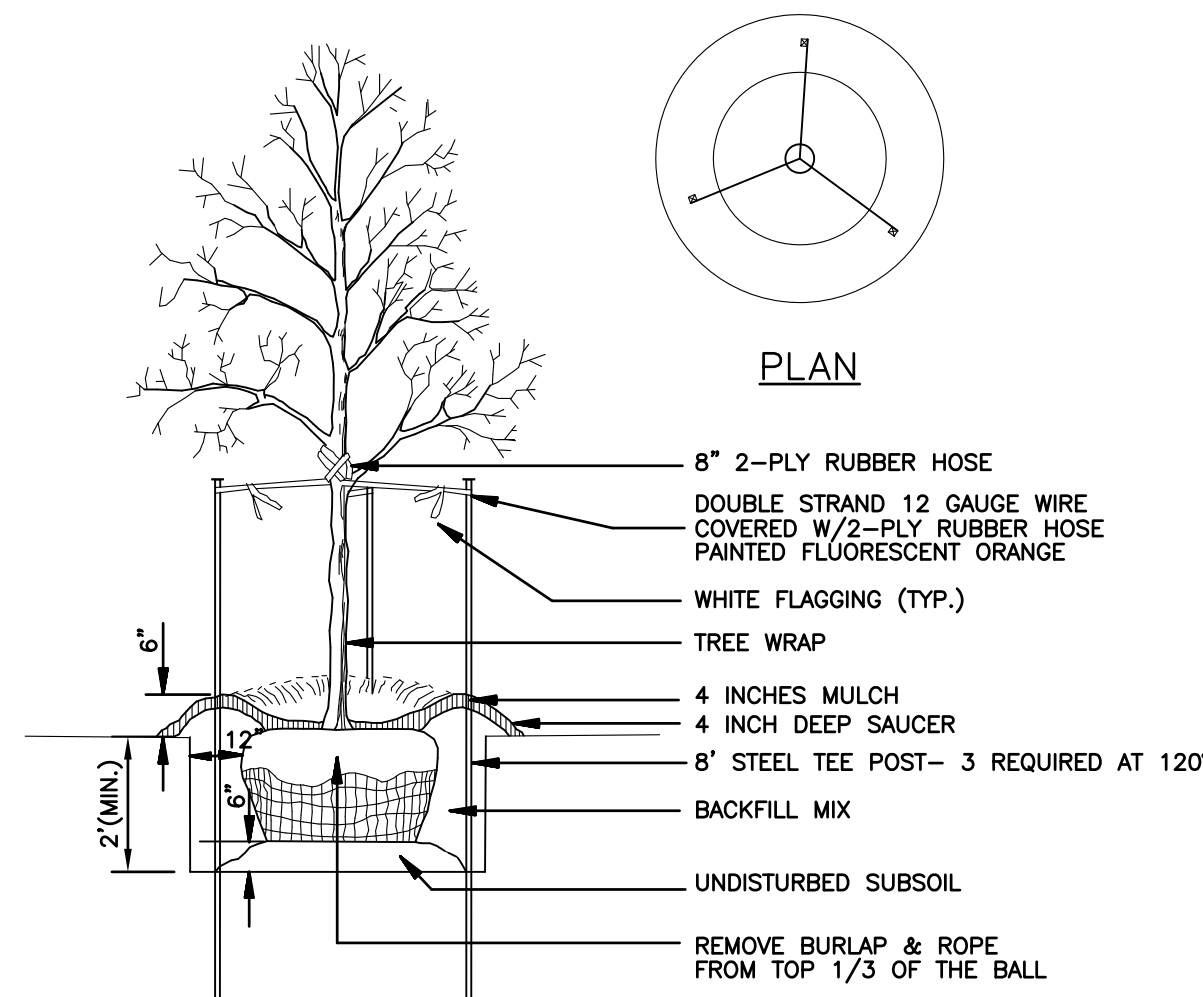
Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____





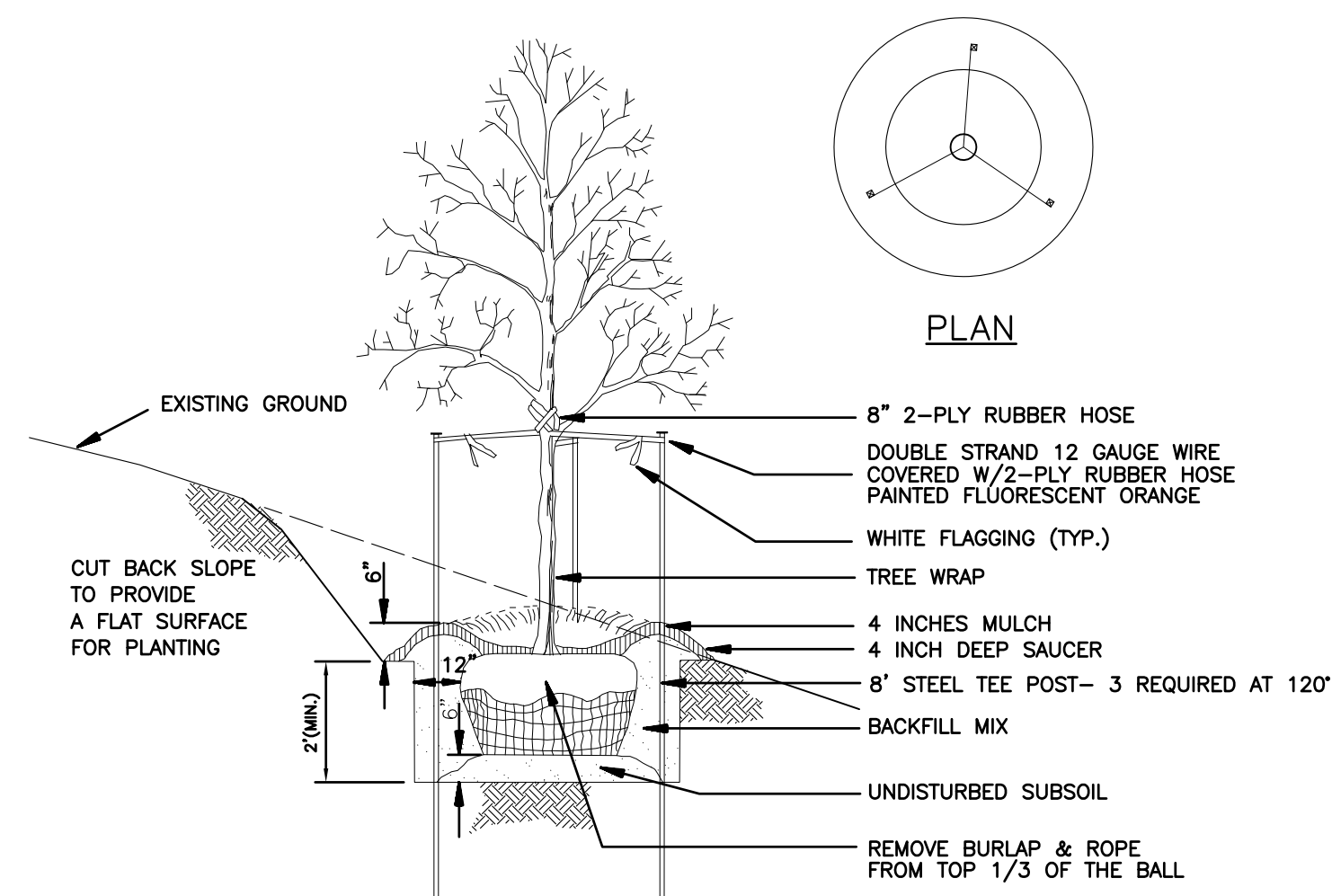


1 TREE STAKING & PLANTING DETAIL
D-10 SCALE: N.T.S.



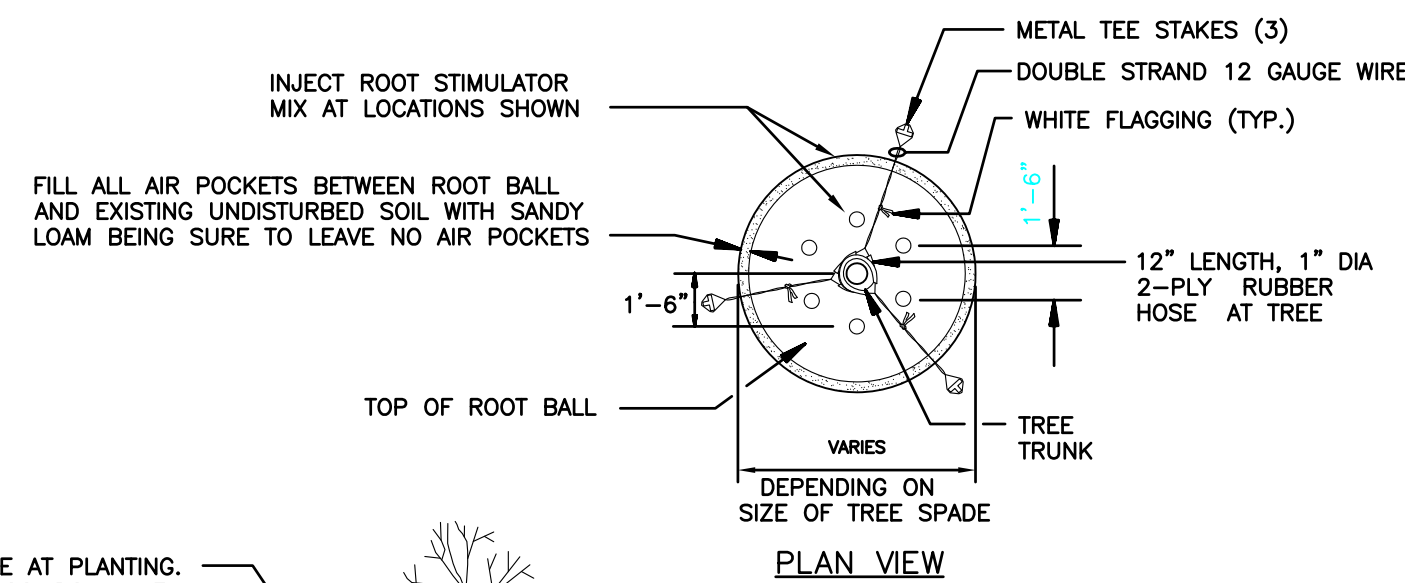
NOTE: SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

2 TREE PLANTING
D-10 SCALE: N.T.S.



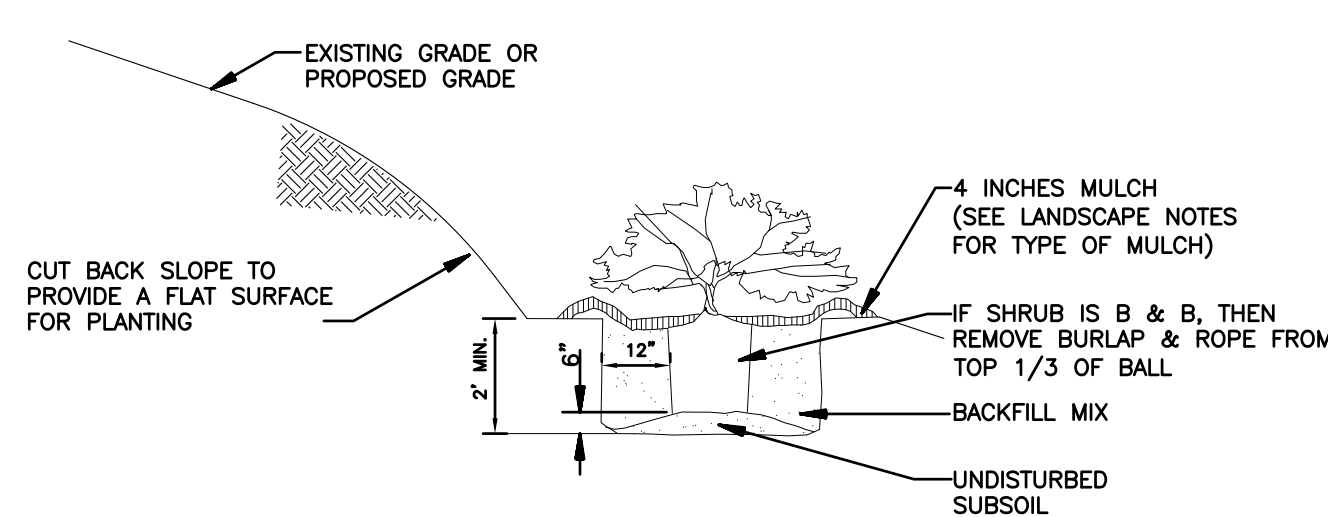
NOTE: SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

3 TREE PLANTING ON SLOPE
D-10 SCALE: N.T.S.

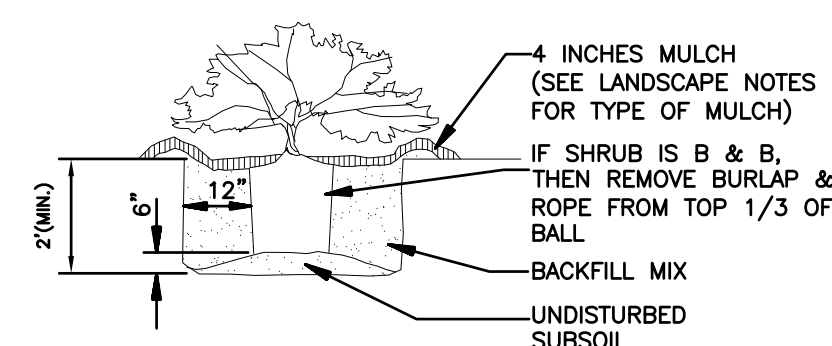


NOTE: PLANT TREE 2"-4" ABOVE GRADE

4 MACHINE DUG TREE PLANTING
D-10 SCALE: N.T.S.



5 SHRUB PLANTING ON SLOPE
D-10 SCALE: N.T.S.



6 SHRUB PLANTING
D-10 SCALE: N.T.S.

NOTE:

1. PLANT TREES WITH A MINIMUM CALIPER OF TWO INCHES MEASURED SIX INCHES ABOVE THE GROUND AND A ROOT BALL NO SMALLER THAN TWO FEET IN DIAMETER AND 16 INCHES IN DEPTH.
2. THE BEST TIMES FOR PLANTING ARE EARLY SPRING AND EARLY FALL. TREES PLANTED IN THE SUMMER RUN THE RISK OF DEHYDRATION.
3. PLANT ALL TREES AT LEAST THREE-AND-A-HALF FEET FROM THE END OF HEAD-IN PARKING SPACES IN ORDER TO PREVENT DAMAGE FROM CAR OVERHANGS.
4. DIG THE TREE PIT AT LEAST TWO FEET WIDER THAN THE ROOT BALL AND AT LEAST SIX INCHES DEEPER THAN THE BALL VERTICAL DIMENSION.
5. ESPECIALLY IN AREAS WHERE CONSTRUCTION ACTIVITY HAS COMPACTED THE SOIL, THE BOTTOM OF THE PIT SHOULD BE SCARIFIED OR LOOSENED WITH A PICK AX OR SHOVEL.
6. AFTER THE PIT IS DUG, OBSERVE SUB-SURFACE DRAINAGE CONDITIONS. WHERE POOR DRAINAGE EXISTS, THE TREE PIT SHOULD BE DUG AT LEAST AN ADDITIONAL TWELVE INCHES WIDER AND THE SOIL AMENDED TO ALLOW ROOTS GROW PROPERLY.
7. BACKFILL SHOULD INCLUDE A PROPER MIX OF SOIL AND FERTILIZER. ALL ROOTS MUST BE COMPLETELY COVERED. BACKFILL SHOULD BE THOROUGHLY WATERED AS IT IS PLACED AROUND THE ROOTS.
8. IMMEDIATELY AFTER IT IS PLANTED, THE TREE SHOULD BE SUPPORTED WITH STAKES AND STRAPS TO FIRMLY HOLD IT IN PLACE AS ITS ROOT SYSTEM BEGINS TO DEVELOP. REMOVE STAKES AND TIES AFTER ONE YEAR.
9. SPREAD AT LEAST THREE INCHES OF MULCH OVER THE ENTIRE EXCAVATION IN ORDER TO RETAIN MOISTURE AND KEEP DOWN WEEDS. AN ADDITIONAL THREE-INCH SAUCER AND MULCH SHOULD BE PROVIDED TO FORM A BASIN AROUND THE TRUNK OF THE TREE. THIS SAUCER HELPS CATCH AND RETAIN MOISTURE.
10. CONSCIENTIOUS POST-PLANTING CARE, ESPECIALLY WATERING, PRUNING AND FERTILIZING, IS A MUST FOR STREET AND PARKING LOT TREES. PRUNE OFF BROKEN OR DAMAGED BRANCHES.

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED DRAINAGE PLAN

Date: _____ Permit # _____

Signed: _____



11/30/12

EROSION AND SEDIMENTATION CONTROL NARRATIVE

PROJECT DESCRIPTION

The purpose of this project is for grading & fill operations. The project is owned by PHD @ WILMINGTON, LLC. The site is currently not occupied. Approximately 0.71 acres will be disturbed during construction. The maximum fill will be 2-3 feet.

The project is scheduled to begin construction in Fall 2012 with project completion and final stabilization by Spring 2012. The erosion and sediment control program for this project will include the installation of a suitable construction entrance, silt fence and inlet protection. Approximately 6,400sf of existing asphalt will remain through construction and be overlaid prior to completion.

ADJACENT PROPERTY

Adjacent property owners are noted on the Existing Conditions sheet.

SOILS

The soils at this site are silty sand.

EROSION AND SEDIMENT CONTROL MEASURES

All vegetative and structural erosion and sediment control practices shall be constructed and maintained by the contractor according to these plans and specifications and the minimum standards of the Dept. of Environmental Management, Land Quality Section and New Hanover County. The contractor shall also follow any additional requirements as outlined by the Project Engineer.

STRUCTURAL PRACTICES

- Vehicle wheels shall be clean when leaving the site to prevent the tracking of mud on paved roads.
- Construction Road Stabilization: Construction traffic shall be limited to stabilized areas. At a minimum, a temporary gravel construction entrance shall be provided as shown on this drawing.
- Silt Fence: Silt fences shall be provided where shown and as needed on the site plan. These barriers shall be used to contain sediment.
- Rip Rap/Gravel Filter Sediment Basins: Construct basin to the shape and dimensions shown in the details. The basin is to be placed below the existing ditch flow line by 2' with the berm built above as dimensioned.

VEGETATIVE PRACTICES

Temporary Seeding: All denuded areas shall receive temporary seeding within 14 days of completing initial earthwork. Temporary seeding shall also be used to stabilize finished grade areas if the time of year is outside the specified permanent seeding periods. Temporary seeding shall be in accordance with temporary seeding specifications.

MANAGEMENT STRATEGIES

- Perimeter measures are to be installed prior to grubbing or grading.
- Stockpile and/or waste areas must be maintained within the limits of the areas protected by the proposed measures and otherwise temporarily seeded if to be left stockpiled over 14 calendar days.
- Construction shall be planned so that grading operations can begin and end as quickly as possible.
- Silt Fences and tree protection fence shall also be installed prior to or as a first step in construction.
- The Contractor shall be responsible for the installation and maintenance of all erosion and sediment control practices. Vegetative Ground Cover Immediately following grading, all areas shall receive either permanent or temporary seeding, as applicable, as follows:

	Feb-May	June-Sept	Oct-Jan
Permanent Seed:	K-31 Fescue @ 5#/1000 SF	K-31 Fescue @ 5#/1000 SF	K-31 Fescue @ 5#/1000 SF
Temporary Seed:	Winter Rye @ 50#/Ac	German Millet @ 40#/Ac	Winter Rye @ 50#/Ac
Fertilizer:	10-10-10 @ 25#/1000 SF	Mulch: Straw @ 90#/1000 SF	
Lime:	100#/1000 SF	Tack: 200 gallons/Ac on all mulching	

MAINTENANCE:

- Reseed and mulch bare spots larger than 9 square feet (limited to 5% maximum of site area.)
- Maintain all seeded areas until uniform stand is acceptable.
- If growth is not established by final project inspection, continue specified attention until the stand is acceptable.
- Correct and repair all undue settling and erosion within 1 year after final inspection.
- Remove from the site, all erosion control structures after complete stabilization at end of construction period.
- Remove silt from sediment pits and from behind check dams when silt is within half depth of the pit or spillway. Dispose of in an area where silt cannot re-enter pit/trap.

CALCULATIONS:

The practice utilized for the proposed site did not require formal calculations.

OWNER: PHD @ WILMINGTON, LLC, 3930 Max Pl. Boynton Beach, FL 33436

Erosion Control Notes:

- Obtain erosion control plan approval prior to beginning land disturbance. Retain a copy of the approved erosion control plan and permit on site. Call New Hanover County to notify the Erosion Control Inspector of a start date prior to land disturbance.
- Construct the construction entrance as shown on the plan. Maintain the construction entrance daily to ensure that mud and silt will not be tracked onto the paved surface. If mud is tracked onto the road surface, it is to be removed immediately.
- Construction entrance location may not vary without prior approval from Engineer and New Hanover County.
- Clear the area needed to construct the perimeter erosion control measures including silt fence, and silt fence outlets. Erosion control measures downstream of all pipes shall remain in-place until permanent measures are stabilized.
- Install silt fence and silt fence outlets.
- Begin clearing, grubbing, and topsoil stripping for building pad and surrounding improvements.
- Rough grade the site.
- Construct sanitary sewer system throughout project. Do not excavate more than can be installed in that day's work. Seed, mulch, and tack disturbed areas after each day's work.
- Construct the storm sewer system throughout the project. Install inlet protection devices.
- Seed, straw and tack areas behind the curb and gutter that are graded to their final disposition.
- Contact New Hanover County Erosion Control for inspection prior to removal of erosion control measures.
- Upon stabilization of seeded areas and approval from New Hanover County, remove silt fence and silt fence outlets.
- Seed, straw and tack any remaining exposed areas.

MAINTENANCE NOTES:

- DO NOT LET ANY AREA REMAINED EXPOSED FOR MORE THAN 14 CALENDAR DAYS WITHOUT APPLYING TEMPORARY SEEDING.
- MAINTAIN ALL EROSION CONTROL MEASURES DAILY AND RESEED DISTURBED AREAS AS NEEDED.
- INSPECT ALL EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAINFALL EVENT. REPAIR AS NEEDED.
- AT THE END OF EACH DAY'S STORM DRAINAGE OPERATION, CONSTRUCT A TEMPORARY PIPE INLET PROTECTION DEVICE UNTIL THE NEXT DAY'S OPERATION CONTINUES.

EROSION CONTROL MAINTENANCE PLAN

ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. STRUCTURES THAT SHALL BE INSPECTED INCLUDE BUT ARE NOT LIMITED TO:

SILT FENCE AND FABRIC INLET PROTECTION ANY FABRIC WHICH COLLAPSES, TEARS, DECOMPOSES, OR BECOMES INEFFECTIVE SHALL BE REPLACED IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN SEDIMENT BEHIND THE FENCE REACHES 6".

SEEDING, FERTILIZING, AND MULCHING SEEDED AREAS SHALL BE INSPECTED FOR FAILURE AND NECESSARY REPAIRS AND RE-SEEDING SHALL BE MADE WITHIN THE SAME SEASON.

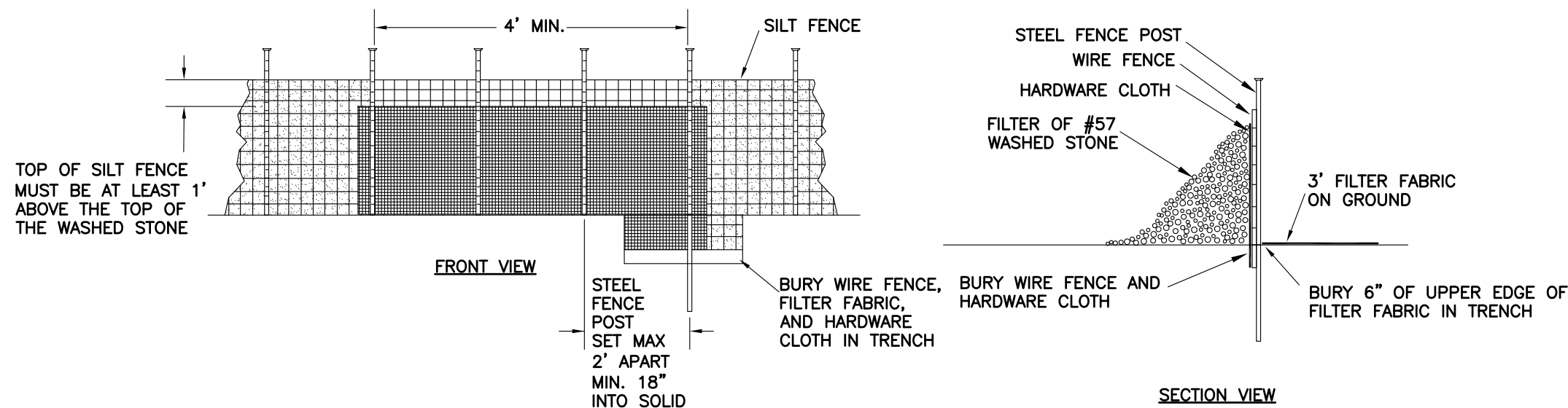
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER A RAINFALL, IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO ROADWAYS.

HARDWARE CLOTH AND GRAVEL INLET PROTECTION INSPECT THE BARRIER AFTER EACH RAIN, REMOVE SEDIMENT WHEN HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS. UPON STABILIZATION OF DRAINAGE AREA, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, EITHER SALVAGE OR DISPOSE OF PROPERLY. BRING DISTURBED DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. STABILIZE ALL BARE AREAS AROUND THE INLET.

TEMPORARY PIPE INLET PROTECTION TEMPORARY PIPE INLET PROTECTION MUST BE ROUTINELY INSPECTED AFTER RAINFALL EVENTS AND MAINTAINED AS NEEDED TO ENSURE THE MEASURE IS IN PROPER WORKING CONDITION. METAL POSTS SHALL BE REPLACED IS DAMAGED. ACCUMULATED SEDIMENT SHALL BE REMOVED. ANY SILT WHICH COLLAPSES, TEARS, DECOMPOSES, OR BECOMES INEFFECTIVE SHALL BE REPLACED IMMEDIATELY.

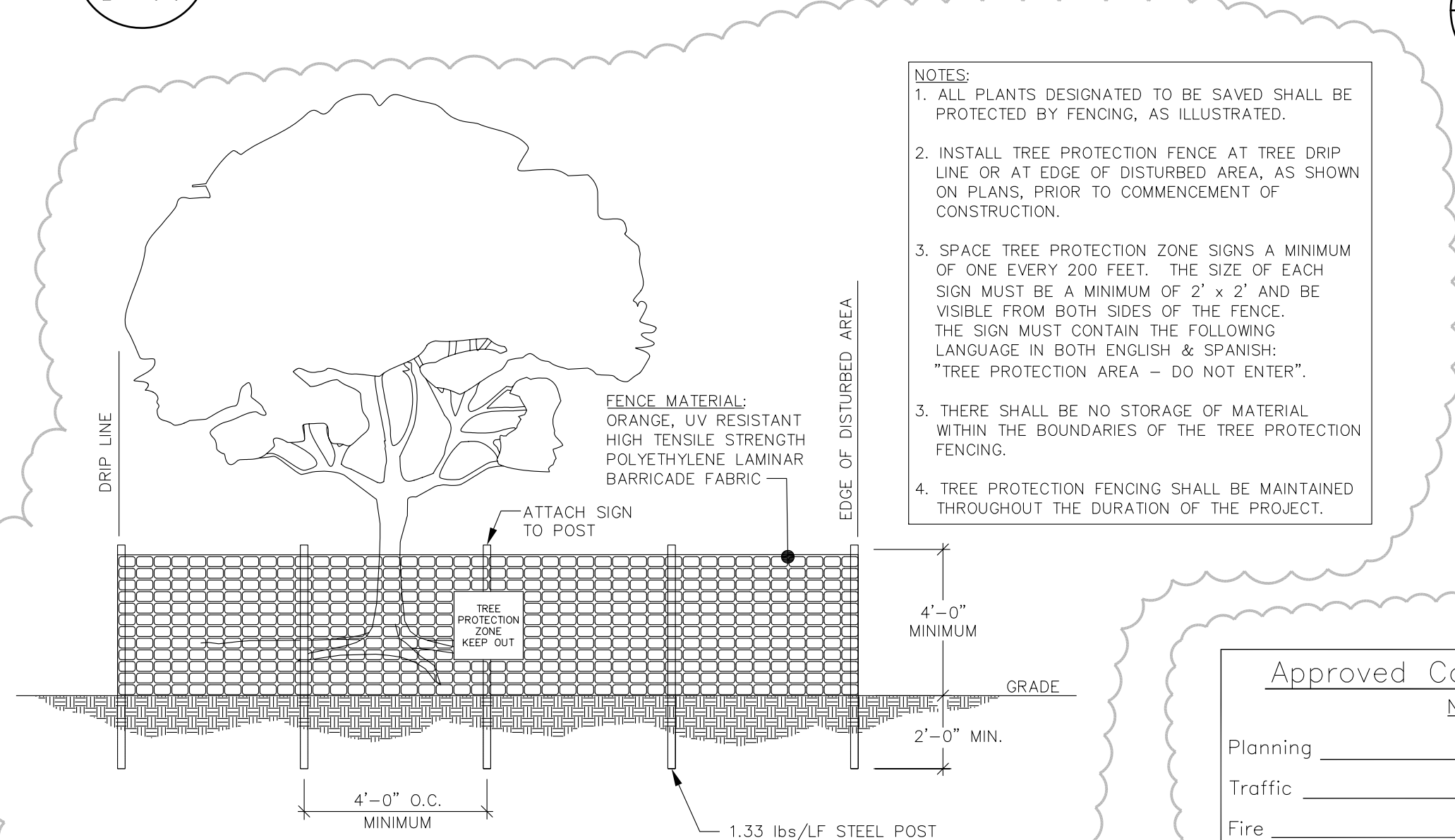
PIPE OUTLET PROTECTION STONE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. DISLOCATED STONE SHALL BE REPLACED IMMEDIATELY AND ANY SCOUR OR ERODED AREAS SHALL BE REPAIRED IMMEDIATELY.

1 EROSION CONTROL MAINTENANCE PLAN
D-11 SCALE: N.T.S.



- NOTES:
- REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED.
 - REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

2 STD. SILT FENCE OUTLET
D-11 SCALE: N.T.S.



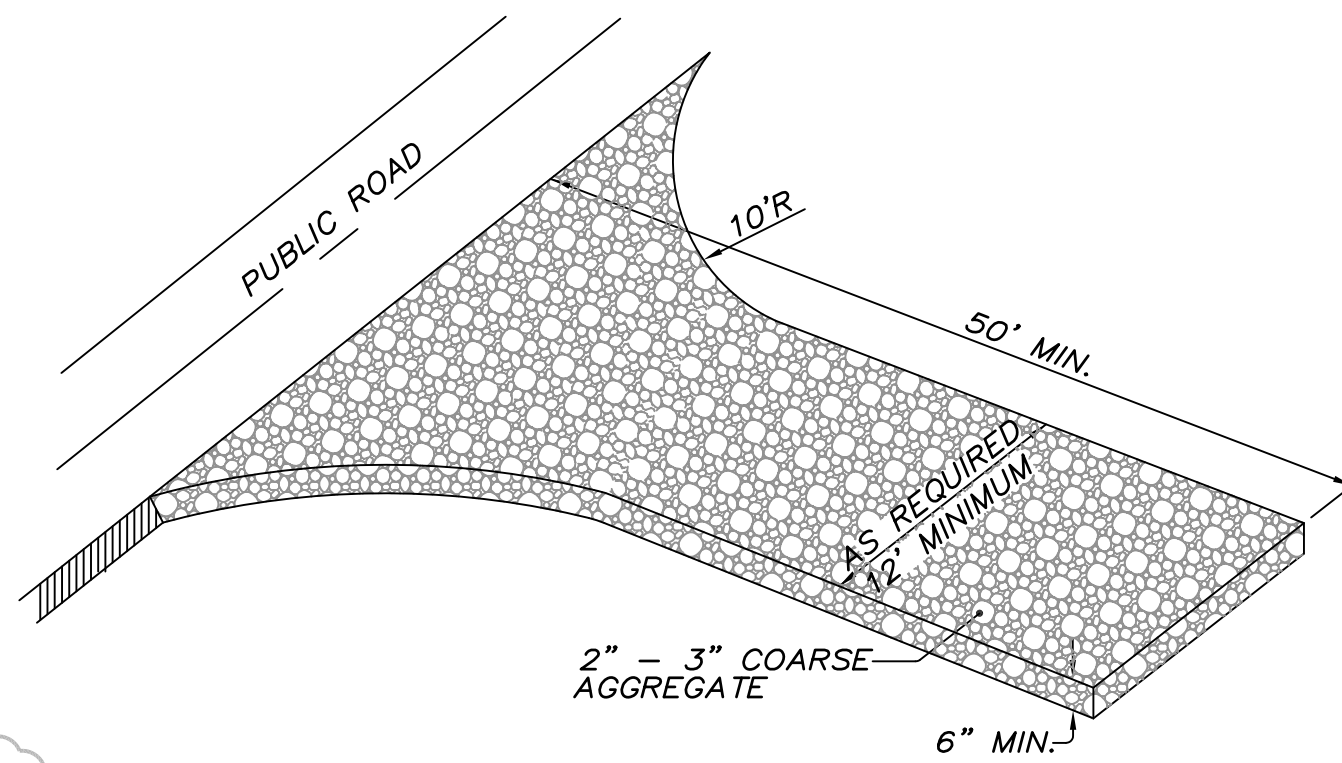
4 TREE PROTECTION FENCE
D-11 SCALE: N.T.S.

CONSTRUCTION SPECIFICATIONS

- CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENING OVER ALL BLOCK OPENING TO HOLD GRAVEL IN PLACE.
- USE WASHED STONE PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE.
- INSTALL 1/4 IN. WIRE MESH HARDWARE CLOTH, AND METAL POSTS THAT ARE 5 FT. TALL. PLACE THE WIRE MESH A MINIMUM OF 3 FT. HIGH, (2' IN GROUND, 3' ABOVE) AND THE STONE 16" HIGH. MAX POST SPACING = 4'.
- BEFORE COMMENCING CLEARING & GRUBBING OPERATIONS, THE CONTRACTOR SHALL FIELD LOCATE ALL EX. INLETS WITHIN THE OPERATIONS AREA AND INSTALL INLET PROTECTION.

(REFERENCE: EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, 6.51)

3 HARDWARE CLOTH AND GRAVEL INLET PROTECTION
D-11 SCALE: N.T.S.



GENERAL NOTES:

- INSTALL CONSTRUCTION ENTRANCE OVER EXISTING ASPHALT TAKING CARE TO AVOID DAMAGE AS EXISTING ASPHALT IS TO BE OVERLAYED PRIOR TO PROJECT COMPLETION.
- INSTALL A 1' LAYER OF SOIL OVER EXISTING ASPHALT.
- INSTALL A GEOTEXTILE LINER OVER NEWLY PLACED SOIL.
- PLACE THE GRAVEL OVER THE GEOTEXTILE LINER TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
- PROVIDE DRAINAGE TO CARRY WATER TO A SUITABLE OUTLET.
- MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING W/2 INCH STONE.

5 CONSTRUCTION ENTRANCE
D-11 SCALE: N.T.S.

